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**THE SALIENCE OF TOPOLOGY IN VERBAL AND PICTORIAL  
REPRESENTATIONS OF PVs IN EFL LEARNERS**

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**ISTAKNUTOST TOPOLOGIJE U VERBALNIM I  
SLIKOVNIM PRIKAZIMA FRAZNIH GLAGOLA  
KOD UČENIKA ENGLESKOGA JEZIKA**

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## **ABSTRACT**

The aim of this thesis is to look at the salience of topology in strategic meaning construal of English particle verbs in the Mexican and the Croats' verbal and pictorial representations. We conducted a qualitative analysis on a subcorpus of 30 questionnaires taken from the Learner Corpus collected by Geld (2009a). Theoretical framework and analytical tools were taken from Geld (2009b). We also analysed the development of strategic construal in three individual participants. Thus, individual case studies are also presented.

In the theoretical part of this thesis we will focus on strategic meaning construal of particle verbs (PVs), previous research done on the Learner Corpus (Geld 2009a) and provide brief description of the procedure, categories, and most important findings regarding the differences between the PVs containing light and heavy verbs and particles *out* and *in*.

The particle-verb analysis is separated into two parts – the PVs containing light verbs and the PVs containing heavy verbs. Each particle verb is analysed individually, and examples of both the verbal answers and pictorial representations are provided. Five categories important for this research are – topological determination, compositional meaning, lexical determination, (visual) paraphrase, and misinterpretation.

The case studies are three participants – two Croats and one Mexican. Verbal answers and pictorial representations are analysed separately followed by discussion and conclusions.

**KEY WORDS:** particle verb, light verb, heavy verb, particle *in*, particle *out*, topology, compositionality, lexical determination, lexical drawing

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## 0. INTRODUCTION

The aim of this thesis was to investigate the salience of topology in the strategies activated in the Croatian and Mexican learners of English. We analysed both verbal and pictorial representations of particle verbs (PVs). We wished to identify the strategies activated in the meaning construal of particle verbs and investigate possible differences between the Croats and the Mexicans in that regard. We also conducted three individual cases studies pertaining to strategy development. We will not discuss in detail the relationship between the verbal answers and the pictorial representations. Our central aim was not whether the text supports the drawing or vice versa or what is more informative.

The data used in this study is a part of the Learner Corpus that was collected by Geld (2009a). A subcorpus of 30 questionnaires was used with the purpose of analysing strategies of the meaning construal in both verbal and pictorial representations. The theoretical framework and analytical tools were taken from Geld (2009b). In the theoretical part we will focus on strategic meaning construal of particle verbs. The previous research will be analysed and the results for topological vs. lexical determination and the differences between the particles *in* and *out* will be presented.

The research will be described in two parts. In the particle-verb analysis we first focus on the PVs containing light verbs and then the PVs containing heavy verbs. PVs are analysed one by one and examples provided for the verbal answers and pictorial representations. Each analysis is followed by discussion and conclusions. In the case studies, three different participants are analysed. Each questionnaire is separated into 3 sets of 15 answers, and then further into groups of 5, followed by discussion and conclusions. The same procedure is applied to the pictorial representations as well. The answers are then compared, and conclusions drawn.

# 1. THEORETICAL BACKGROUND

## 1.1 Strategic Meaning Construal of Particle Verbs

Second language development, processing and meaning construal depend on experience, general cognitive processes, and the language itself (Geld & Stanojević 2016: 5). In the case of particle verbs, both the verb and the particle have been found important when it comes to the process of constructing meaning in L2. Particle verbs (PVs) consist of combinations of semantically closely linked verbs and particles in which the particles are not used as prepositions (Geld 2011: 49). According to Geld and Maldonado (2011: 77), due to their polysemy, particle verbs have always posed a significant problem for second language learners of English and “rote learning” has been encouraged.

Particles are also defined as *satellites* (Talmy 2000: 103 as cited in Geld 2009, 2011). There are *verb-framed languages* and *satellite-framed languages*. In the verb-framed languages, the main verb expresses the core schema, and in the satellite-framed languages, the satellites express the core schema. The satellites can appear in forms of bound affixes or free words (Geld 2011: 49). Geld (p. 53) argues that the prefixes in Croatian could be considered as satellites and that they do carry meaning. This is where, for example, Croatian and Spanish differ because in Slavic languages the satellite expresses the core schema, while the main verb expresses the core schema in Spanish. Those differences could affect how the Croatian and the Mexican learners of English perceive particle verbs.

It is also important to mention that verbs such as *put* and *take* are categorized as “basic, light, delexical, high-frequency, easy, simple, semantically vague, schematic, etc.” (p. 53). Geld (p. 53) argues that those types of verbs are more likely to lead to topological determination due to “the semantic ‘strength’ of the particle”, while heavy verbs “override the contribution of the particle, which results in lexical determination”.

The degree of schematicity of light and heavy verbs and the degree of informativeness of the particles is what determines what learners attend to when processing language. This occurs on both the conscious and subconscious level and it restructures their knowledge (Geld & Stanojević 2016: 6). Thus, the factors that affect the construal of English PVs are L2 language-internal factors (PVs containing light or heavy verbs and the extent to which the particles are informative), both L1 and L2 language-internal factors (verb-framed vs. satellite-framed languages), and language-external factors (general language proficiency, years of learning L2, etc.) (Geld & Letica Krevelj 2011, Geld 2011).

## **1.2 Previous Research**

### **1.2.1 Geld (2009b)**

The research was done on 68 Croats and 32 Mexicans. They were all majors of English. Due to the unexpected differences between the two groups in terms of the number of English majors at the universities and levels of proficiency, the researcher selected the Croatian students in their 3<sup>rd</sup> and 4<sup>th</sup> year of study and the Mexican students in their last year of study.

The questionnaire that was used consisted of 45 particle verbs with different meanings. All the PVs used in the research were those whose rating had shown tendencies towards the metaphorical interpretation. To be more precise, there were 20 particle verbs – 3 light verbs and 7 heavy verbs in combination with the particles *out* and *in*. The light verbs included – *go*, *take*, and *put*, while heavy verbs included – *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* (see 2.3.1 for the whole list of meanings). The participants' language proficiency was tested beforehand.

We will now look more closely at the two studies conducted on this corpus of data that are important for our research. The first one was done by Geld (2011) and explores the differences between the Croats and the Mexicans in their answers for the PVs containing light and heavy verbs with focus on three main categories – topology, compositionality, and lexical determination. The second one was done by Geld and Maldonado (2011) and it focuses specifically on the particles and their construal.

### **1.2.2 Topological vs. Lexical Determination by Geld (2011)**

The answers were coded into the following categories – topological determination, lexical determination, compositional meaning, paraphrase, basic opposition, misinterpretation, context, and Latinate explanations. The three main categories – *topological determination*, *lexical determination*, and *compositional meaning* were then further analysed. It was expected by the researcher that topology would be more typical for the PVs containing light verbs, while lexical determination and compositionality would be more typical for the PVs containing heavy verbs.

The results for the particle – *out* showed that topology was indeed more visible in the PVs containing light verbs, while lexical determination occurred more with the PVs containing heavy verbs. Compositionality was also more apparent with the PVs containing heavy verbs. The results for the particle – *in* showed that topology was again more visible in the PVs containing light verbs, while lexical determination occurred more with the PVs

containing heavy verbs. Compositionality was also more apparent with the PVs containing heavy verbs.

It was concluded that the participants relied more on the particle with the light verbs as they are more schematic and vague in their meaning, while *in* and *out* are ubiquitous and extremely productive. Compositionality, in turn, occurs more frequently with the PVs containing heavy verbs because it is easier for participants to find a correlation between a heavy verb and the assigned meaning. It is also important to note that compositionality occurs on a spectrum between the lexical and topological determination – it is partial and gradient.

The second central aim was the influence of the participants' first language on the meaning construal of the PVs. It was expected that there would be more topology and compositionality among the Croatian learners of English than among the Mexican learners of English, whereas lexical determination and to a lesser extent compositionality would be more visible among the Mexican learners of English.

On the one hand, it was found that with PVs containing *light verbs* and the particle *out* compositionality occurred significantly more among the Croats, than among the Mexicans. The same can be said about the PVs containing *heavy verbs* and the particle *out*. In those cases, lexical determination also occurred significantly more among the Mexicans. On the other hand, with the PVs containing *light verbs* and the particle *in* there were no significant differences between the two groups. The same cannot be said about the PVs containing *heavy verbs* and the particle *in*, where compositionality again occurred significantly more among the Croats than the Mexicans and lexical determination more among the Mexicans than among the Croats.

It was concluded that with the particle *out*, compositionality was more typical for the PVs containing heavy verbs. However, unlike the Mexican participants, the Croats showed more tendencies towards compositionality in both the PVs containing light and the PVs containing heavy verbs. Lexical determination occurred more with the PVs containing heavy verbs and more among the Mexicans than among the Croats. When it comes to the particle *in*, unlike with the particle *out*, both groups gave similar results with the PVs containing light verbs. However, with the PVs containing heavy verbs, the Croats again showed more tendencies towards compositionality than the Mexicans, while the Mexicans showed more tendencies towards lexical determination than the Croats. The author concludes that the Croats and the Mexicans could differ less in their answers when it comes to the particle *in* because the particle *out* is more informative and also “the schematicity of light verbs is less likely to lead to a more compositional meaning construal” (Geld 2011: 69).

On the one hand, it seems harder for both groups to present compositional answers for the PVs containing light verbs and solely relying on the particle *in*. On the other hand, to a significantly larger extent than the Mexicans, the Croats resort to compositionality when it comes to the PVs containing light verbs and the particle *out* and with the PVs containing heavy verbs and the particles *in* and *out*. The Mexican are much more likely to resort to lexical determination than the Croats. Geld suggests that this happens because of the already mentioned typological differences between Croatian and Spanish.

### 1.2.3 Particles *out* and *in* by Geld and Maldonado (2011)

In their research, Geld and Maldonado (2011: 78) explore whether there are other strategies learners could apply when learning particle verbs besides “rote learning” and whether the processes are similar to those in the first language acquisition. In order to explore this, the research was done on “two groups of speakers of unrelated languages” – Croatian and Spanish.

The researchers point out that because of the nature of the Spanish language where the verb carries the core schema, the Mexican learners might experience more problems with particle verbs where the particle carries the core schema. It is argued that:

*“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”* (p. 80).

The centre of attention are the particles *in* and *out* and their semantic contribution and the aim was 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” (p. 82).

For the purposes of this work, they focused on specific meanings of the particles *in* and *out*. The particle *in* as static and dynamic containment and “the vantage point as an interior/exterior cluster” (p. 83). The particle *out* as described by Lindner (1981: 81-140) and taken by the researchers (Geld & Maldonado 2011: 82) – “the removal or departure of one concrete object from within another object or space”, static configuration, abstract displacement, extensions and expansions in time and space, and “moving away”.

They expected the results to show that the second language learners understand that language is symbolic even “with highly schematic linguistic categories”, that “strategic construal of *in* and *out* is comparable to their cognitive linguistic description in English as L1” and that “strategic construal of *in* and *out* shows a cognitively motivated path from the

topological to the aspectual” (p. 83). The aim was to investigate *topological*, *compositional*, and *lexical* semantic determination and to study “the construal of particles” more thoroughly.

There were 4198 answers (1991 for *in* and 2207 for *out*). The focus of the research were two categories – topology and compositionality. There were 9 categories for *in* and 10 categories for *out*, and 4 groups of meanings of the PVs – concrete processual topology (motion, entering or leaving some space; 15 PVs), abstract processual topology (a participant becomes or stops being a part of some state or abstract dominion; 22 PVs), aspect (termination; 7 PVs), and aspect (inception; 1 PV).

The results for *out* were as follows (pp. 86-96):

- 1) *Out* as concrete processual topology included: *processual topology* (11.50%; concrete/physical, i.e. going out/leaving an enclosed space/container – bodies, houses, buildings, drawers, etc.); *concrete/physical static topology* (12.10%; i.e. out of our dominion/world/reach/normal position/place/physical boundaries/limits); *abstract topology* (3.25%; static displacement/change of place, i.e. out of the previous state/activity/original activity/state/normal state/routine/the usual order/circuit/out of what is considered expected or correct); *absence* (0.2%; *out* is – absence; absent; isolation; not present; not here; not seen; not visible) *processual topology without direct reference to the container* (1.0%; *out* is – disappear; disappearing; leaving); *aspectual* (1.20%; termination; *out* is – something ended; end; completely; completely stopping; termination; all of something); *concrete and abstract static topology* (7.55%; *out* is outside; where other people are; visible; not hidden; out in the open; out in the larger area; out in all directions or surrounding space); *established metaphor* (0.6%; *out* is – out of the group; not belonging; free, freedom; discarded; unacceptable; negative); and *reverse viewing* (2.7%, change of focus, e.g. take somebody out of life or take life out of somebody);
- 2) *Out* as abstract processual topology included: *processual topology* (6.51%; concrete/physical); *static topology* (5.61%; concrete/physical); *abstract topology* (17.64%; static displacement); *absence* (0.87% *out* is – absence; absent; not present; not here; isolation; not seen; not visible); *processual without direct reference to the container* (0.55%); *aspectual* (0.73%; termination); *static topology* (8.28%; both concrete and abstract – focus on the space outside our immediate dominion); *established metaphor* (1.13%; *out* is – out of the group; not belonging; free; freedom; something discarded; unacceptable; negative); and *reverse viewing* (5.41%; change of focus);



- 3) *Out* as aspectual – termination included: *processual topology* (3.97%; concrete/physical); *static topology* (6.51%; concrete/physical); *abstract topology* (8.10%; static displacement); *absence* (3.94%; out is – absence; absent; not present; not here; isolation; not seen; not visible); *processual without direct reference to the container* (2.06%); *aspectual* (11.61%; termination); *action* (0.43%; out emphasizes the action); *static topology* (1.14%; both concrete and abstract); established metaphor (1.0%; out is – out of the group; not belonging; free; freedom; discarded; unacceptable; negative) and *reverse viewing* (2.43%; change of focus);
- 4) *Out* as aspectual – inception included: *processual topology* (7.61%; concrete/physical); *abstract topology* (3.26%; static displacement); *static topology* (11.96%; both concrete and abstract); and *aspectual* (7.61%; inception; out is – the action starts; the activity is in effect; things are in effect; things are in existence; things begin).

In the first group, concrete processual topology, the most frequent types of strategic construal were – concrete processual topology, concrete/physical static topology, and concrete/abstract static topology. The first one is the “prototypical meaning of *out*”. The second one points either to “the resultant stage of the event described” or in compositional answers – the verb is the process and the particle “the final stage”. The third one puts “our immediate dominion” at the centre of attention but also “visibility and accessibility”.

In the second group, abstract processual topology, the most frequent type of strategic construal was abstract topology (static displacement). It differs from the other two static topology categories in this group. Those categories refer to a location either with an egocentric view (out of our world) or as “outside where other people are”. The authors explain there are “two basic viewer defined regions (the potential private and the actual public)” (p. 93) and that both groups, the Croats and the Mexicans, that participated in this research are aware of them. Nevertheless, in the third most frequent type of answers in this group, they approached the PVs with more abstract meanings using concrete and physical topology. It is important to also mention the fifth most common type of answers – those that included reverse viewing. This change of focus, as the authors call it, could stem from many factors, such as “the centrality of body in human conceptualization”, perception of the body as a container, culture (soul leaving the body), “a lack of linguistic context”, and “the level of language proficiency” (p. 94).

In the third group, aspectual (termination), the most frequent type of strategic construal used by the participants was some kind of termination. However, other answers point to static displacement, egocentric static topology, concrete processual topology, and *out* perceived as inaccessibility and absence. The authors provide the potential path of grammaticalization as follows – leaving an enclosed space > leaving and disappearing > out of where we are/out of reach > out of the previous activity or state > absence > termination. (p. 95). It is also important to mention that egocentric static topology occurred significantly more than static topology referring to “outside of where other people are”. The participants used concrete topology to explain the aspectual meaning, but it was easier to do it from an egocentric point of view.

In the fourth group, aspectual (inception), the most frequent type of strategic construal is not inception, but static topology (outside of where they are). This might mean that “things start as they become visible” and learners perceive it as space coming into their “immediate dominion” (the sun/moon comes out). The second most frequent type is concrete processual topology where the participants assign inceptive meaning to the particle. Abstract topology is also present here. The authors again provide the potential path of grammaticalization as follows – leaving an enclosed space > focus on the space outside the conceptualizer’s dominion > out of the previous activity or state > inception (p. 96).

The results for *in* were as follows (pp. 96-102):

- 1) *In* as concrete processual topology included: *processual topology* (15.37%; concrete/physical; entering a new space/getting (in)to a new space (movement is included)/a (specified) container/going into a certain space/a designated area/a certain piece of space/a place); *static topology* (12.80%; concrete/physical; no motion – in is: a place; a location/space/limited space/confined space/something like a hiding place); *abstract topology* leaning towards *the inceptive aspect* (2.48%; in is – be/get (in)to a new activity/situation/group of people; entering a new situation; beginning of something; starting to get involved); *static topology* (3.47%; focus on the subject’s dominion; *in* is – his/her world; control; dominion; power); *process* (2.01%; concrete and physical, but no container specified; *in* is – going/jumping into; moving towards inside/inwards; entering; returning); *inside* (2.01%; in is – inside, inside of something; not very informative); *intensification* (0.11%; in intensifies the action); *reverse topology* (2.48%); *established metaphor* (0.11%; in is – acceptable and accepting);

- 2) *In* as abstract processual topology: *processual topology* (17.85%; concrete/physical); *abstract topology* leaning towards *the inceptive aspect* (16.91%); static topology (3.55%; concrete/physical); *static topology* (2.75%; focus on the subject's dominion); *process* (1.2%; concrete and physical, but no container specified); *inside* (2.29%; in is: inside, inside of something; not very informative); *intensification* (0.34%; in intensifies the action); *reverse topology* (3.08%); *established metaphor* (0.17%; in is: acceptable and accepting).

The authors point out that *out* is more informative than *in* and that the learners' answers for PVs including *in* are shorter and/or not as specific. Some answers state this explicitly. The authors also argue that *in* is not as informative due to being a natural and neutral state taken for granted (p. 100).

In the first group, concrete processual topology, the most frequent type of strategic construal is concrete processual topology with reference to the container. In this case, the meaning of the whole PV was assigned to the particle *in*, and the same occurred with concrete processual topology with no reference to the container. The second most frequent type was static topology. The authors explain this with the nature of the participants' L1 where "static locations are considered to be more basic than motion events" (p. 101). The two other types of strategic construal that were emphasized were static topology with the focus on the subject's dominion and reverse (non-egocentric) viewing. It is suggested that these are "meaningful and constructive stages in their progress" of constructing meaning because they function as part of learner strategies being employed in situations of not knowing or understanding something entirely (p. 101).

In the second group, abstract processual topology, the most frequent types of strategic construal are concrete processual topology and the inceptive aspect. In the latter, the participants describe the particle as "beginning of something" or "getting (in)to a new activity". This was not expected by the researchers. The particle *in* was also "the mirror image" of the particle *out* and its inceptive strategic construal where "events are initiated as they become accessible from a hidden location". There is no hidden location with the particle *in* because the default state is the accessibility (p. 102).

The researchers have demonstrated that there are similarities between the meaning construal in L1 and L2. The participants' answers show that the same general cognitive processes are used in the meaning construal process of both L1 and L2.

## 2. RESEARCH

### 2.1 Aims and hypotheses

The aim of this study was to look at the strategies that are activated in the process of meaning construal of particle verbs in two groups of learners with different first languages, in this case the speakers of Croatian and Spanish. Our central aim was to investigate differences in verbal and pictorial representations between the Croats and the Mexicans. We are going to discuss results individually particle verb by particle verb.

We are also going to discuss answers provided by three individual participants – two Croatian and one Mexican.

Our hypotheses were that:

- 1) There will be some qualitative differences in the verbal and pictorial representations between the Croats and the Mexicans.
- 2) We will be able to identify the development of strategic construal in individual participants.

### 2.2 The sample and the procedure

In this study we have used a subcorpus of 30 questionnaires taken from a larger Learner Corpus of 100 questionnaires that was collected by Geld (2009a). There were 1343 verbal answers (626 for *in*; 717 for *out*) and 1342 pictorial representations (627 for *in*; 715 for *out*). The purpose was to analyse the strategies of the meaning construal in both verbal and pictorial representations.

The questionnaires were selected based on 3 criteria – the L1 of the participants, the participants' English proficiency and the number of given answers in individual questionnaires. The L1s of the participants were Croatian and Spanish. An equal number of participants was selected from both groups. There were 15 Croatian participants and 15 Mexican participants. We analysed the differences between the two groups. The participants' English proficiency in itself was not our central aim, it just served as a criterion. The number of given answers and pictorial representations in individual questionnaires was also considered so as to have more data to analyse. Those with most answers and drawings were selected for analysis. This analysis was qualitative.

We were interested in the following categories – topological determination, compositional meaning, and lexical determination. Thus, in accordance with the codes provided by Geld (2009, 2011), **5 categories** were used in **the verbal answers**. Let us take a closer look at the categories and provide some examples from our data:

- 1) **TOP** – topological determination (the verb is used to explain the particle or the verb itself is irrelevant and the emphasis is on the particle):
  - *break in* (‘get somebody accustomed to something new’) – “break into something so as to get used to being there”;
  - *take out* (‘obtain an official document or a service’) – “take something out of a certain office”.
- 2) **CMP** – compositional meaning (the verb and the particle are explained separately, or a synonym of the verb is used to explain the particle):
  - *put in* (‘officially make a claim for something’) – “‘put’ – to put your request on the table, to make it known so that it can be considered; ‘in’ – the institution in which you’re making a request; the place where you put your claim so that it can be reviewed”;
  - *draw out* (‘make somebody feel less nervous or shy’) – “drag someone out of a state of nervousness or reserve”.
- 3) **LEX** – lexical determination (only the verb is explained; the emphasis is on the action but no sign of *in/out*):
  - *shut in* (‘trap or injure something by closing something tightly around it’) – “close a door or hatch carelessly”;
  - *cut out* (‘stop doing something’) – “cut the action one is performing”.
- 4) **PPH** – paraphrase (paraphrasing the given meaning):
  - *go in* (‘become hidden’) – “when you don’t want to be found”;
  - *pull out* (‘stop being involved in something’) – “I imagine someone separating himself from a group”.
- 5) **MIS** – misinterpretation (the meaning is wrong):
  - *call in* (‘make a short visit, usually on the way to another place’) – “attention being called briefly by some place”;
  - *write out* (‘write something and include all the necessary information’) – “someone is surrounded by huge piles of papers and that person is trying to collect it all”.

**The pictorial representations** were also categorized into the same **5 categories**. However, for the purposes of this study, it was decided that the word *drawing* would be used for our three main categories: *topological drawing*, *compositional drawing*, and *lexical drawing*. For the category – paraphrase, Geld and Stanojević<sup>1</sup> were further consulted and the term *visual paraphrase* was adopted. It is important to mention that they also suggested two

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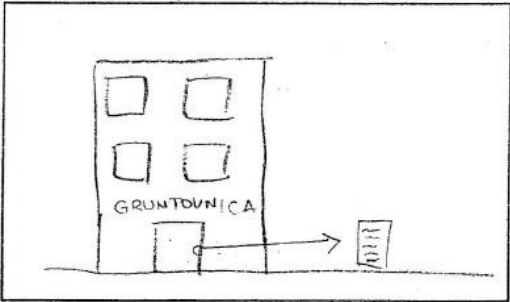
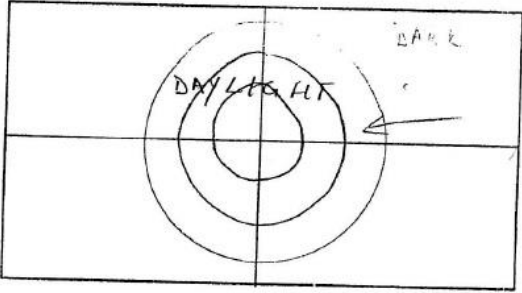
<sup>1</sup> personal communication

types of visual paraphrases – the first one being paraphrasing the sense of the PV given in the questionnaire and the second one called – *a fragmented paraphrase* where, broadly speaking, only a symbol is represented in drawing, e.g. *a computer* for *write out* (‘write something and include all the necessary information’) or *a TV* for *put out* (‘broadcast, publish or issue’). This thesis does not deal with this particular metonymic/metaphoric differentiation but, nevertheless, when such examples were encountered, they were included in the analysis. Let us take a closer look at the categories and provide some examples:

1) **TOP** – topological drawing (only the particle is visible; the emphasis is on something going into something or out of something or it is spatial in some way; the verb is not included)

- *draw in* (‘become dark earlier as winter approaches’)

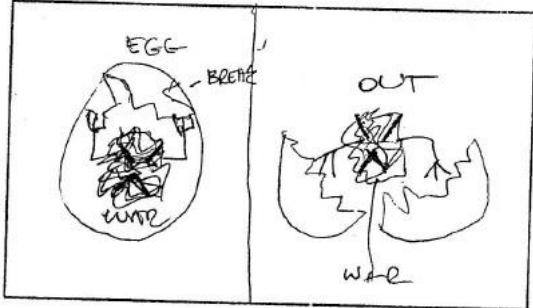
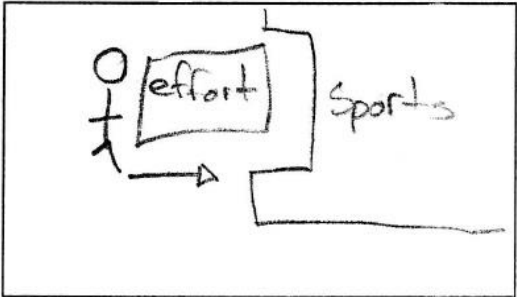
- *take out* (‘obtain an official document of a service’)



2) **CMP** – compositional drawing (both the verb and the particle are shown in the drawing; sometimes the action itself is even written in the picture to make sure we understood the meaning)

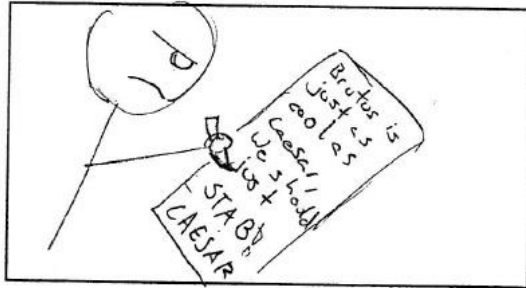
- *put in* (‘spend time or effort doing something’)

- *break out* (‘begin suddenly’)

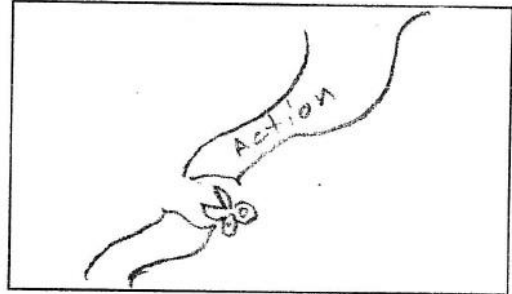


3) **LEX** – lexical drawing (only the verb is pictured; sometimes with or without the given meaning)

- *write in* ('write to ask or complain')

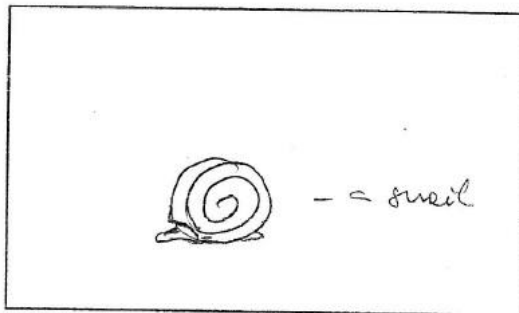


- *cut out* ('stop doing something')



4) **PPH** – visual paraphrase (the sense is paraphrased)

- *go in* ('become hidden')

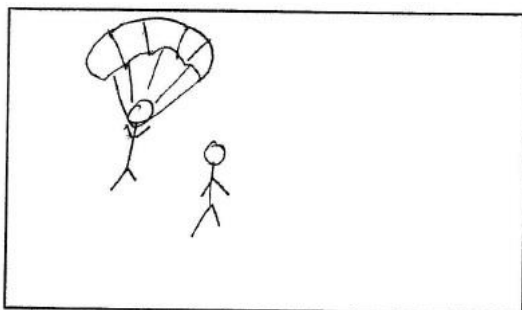


- *pull out* ('stop being involved in something')

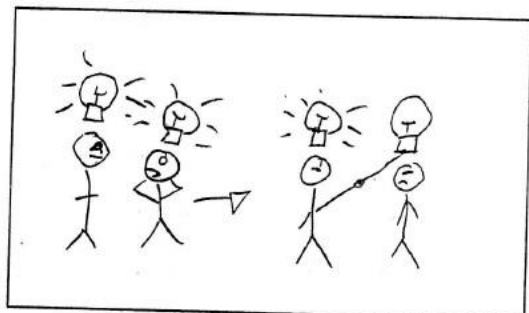


5) **MIS** – misinterpretation (the meaning is wrong)

- *call in* ('make a short visit, usually on the way to another place')



- *shut out* ('refuse to allow a person to share your thoughts, feelings etc.')



In the PVs analysis, we will discuss the results of the PVs containing light verbs in this order: *go in*, *go out*, *take in*, *take out*, and *put in* and *put out*. Then we will discuss the results of the PVs containing heavy verbs in this order: *call in*, *call out*, *cut in*, *cut out*, *break in*, *break out*, *draw in*, *draw out*, *pull in*, *pull out*, *shut in*, *shut out*, and *write in* and *write out*. The order in which we will analyse each meaning of a specific PV is not random. We will look at them as they appeared in the questionnaire and present both the results of the verbal answers and of the pictorial representations. Discussions about each verb containing both *in* and *out* and all their meanings will then be followed by discussion and conclusions. There will also be two main discussions and conclusions of the presented results of the two types of PVs – PVs containing light verbs and then PVs containing heavy verbs.

In the case studies, each questionnaire will be divided into 3 sets of answers and each set will then be separated into groups of 5. In the sets, we will discuss results PV by PV in the order they appeared and then provide all the examples. We will then compare the findings of all 3 sets and give conclusions. We will apply this both to the verbal answers and the pictorial representations, but separately.

## **2.3 Results and discussion**

### **2.3.1 PARTICLE-VERB ANALYSIS**

In this section we will analyse the results of each PV and give both the frequency of topology, compositionality, and lexical determination but also the explanations for each PV and how this was coded in the answers, in both verbal and pictorial way. First, we will analyse the PVs containing light verbs and then the PVs containing heavy verbs.

The answers for the following PVs containing light verbs will be analysed: *go in* ('become hidden'; 'be understood'), *go out* ('stop burning'; 'stop being fashionable'), *take in* ('deceive, make somebody believe something that is not true'; 'understand and absorb something'; 'make a piece of clothing narrower or tighter'), *take out* ('obtain an official document or a service'; 'kill somebody'), *put in* ('officially make a claim for something'; 'spend time or effort doing something'; 'elect a political party as the government'; 'interrupt'), and *put out* ('injure your back, shoulder, hip etc. '; 'extinguish, stop from burning'; 'make a figure or a result wrong'; 'make somebody go to sleep or unconscious'; 'broadcast, publish or issue'; 'switch something off'; 'make trouble, problems, extra work').

The answers for the following PVs containing heavy verbs will be analysed: *call in* ('make a short visit, usually on the way to another place'; 'send for somebody professional and official'; 'make a public request for a product to be returned'), *call out* ('ask somebody to



come and help you when there is an emergency’), *cut in* (‘interrupt somebody’s conversation’); *cut out* (‘prevent something from reaching somewhere’; ‘stop doing something’; ‘stop working’), *break in* (‘wear something until it is comfortable’; ‘get somebody accustomed to something new’; ‘interrupt a conversation’), *break out* (‘become covered in something, like in sweat or rash’; ‘begin suddenly’; ‘escape’), *draw in* (‘become dark earlier as winter approaches’); *draw out* (‘make something last longer’; ‘make somebody feel less nervous or shy’), *pull in* (‘attract people in large numbers’; ‘move to the side of the road to stop’); *pull out* (‘stop being involved in something’), *shut in* (‘trap or injure something by closing something tightly around it’), *shut out* (‘refuse to allow a person to share your thoughts, feelings etc.’; ‘stop something from entering’), *write in* (‘write to ask or complain’), and *write out* (‘write something and include all the necessary information’).

### **2.3.1.1 Particle verbs containing light verbs**

In this subsection, we analyse the PVs containing the light verbs *go*, *take*, and *put* and the particles *in* and *out*. There were 598 verbal answers (269 for *in* and 329 for *out*) and 598 pictorial representations (269 for *in* and 329 for *out*). Here is the list of all the PVs and their meanings:

- 1) *go in* (‘become hidden’; ‘be understood’);
- 2) *go out* (‘stop burning’; ‘stop being fashionable’);
- 3) *take in* (‘deceive, make somebody believe something that is not true’; ‘understand and absorb something’; ‘make a piece of clothing narrower or tighter’);
- 4) *take out* (‘obtain an official document or a service’; ‘kill somebody’);
- 5) *put in* (‘officially make a claim for something’; ‘spend time or effort doing something’; ‘elect a political party as the government’; ‘interrupt’);
- 6) *put out* (‘injure your back, shoulder, hip etc.’; ‘extinguish, stop from burning’; ‘make a figure or a result wrong’; ‘make somebody go to sleep or unconscious’; ‘broadcast, publish or issue’; ‘switch something off’; ‘make trouble, problems, extra work’).

#### **2.3.1.1.1 *go in* and *go out***

In the next section we analyse the verbal answers and pictorial representations of the PVs *go in* and *go out* and their meanings. Overall there were 120 verbal answers and 120 pictorial representations.

There were 60 verbal answers and 60 pictorial representations of *go in*. We analysed the following meanings:

- 1) 'become hidden';
- 2) 'be understood'.

There were 60 verbal answers and 60 pictorial representations of *go out*. We analysed the following meanings:

- 1) 'stop burning';
- 2) 'stop being fashionable'.

#### 2.3.1.1.1.1 *go in* ('become hidden')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *go in* and its meaning 'become hidden'.

In **the verbal answers**, among **the Croats** there were **5** topological answers, **7** compositional answers, and **3** paraphrases. **The Mexicans** gave **5** topological answers, **6** compositional, **3** paraphrases and **1** misinterpretation.

There was an equal number of answers referring to topology among the Croats and the Mexicans (Cro 5/15 vs. Mex 5/15). The most prototypical answer included – *to go + into a place (a hiding place, a closed space, a dark place, basement, closet, shell, box, shadows, cave)*. In the rest of the answers both groups showed more tendencies towards compositionality (Cro 7/15 vs. Mex 6/15). Those answers also included – *verb + into a place*. For the verb, they used synonyms such as – *enter, get, withdraw, or disappear (into)*. Paraphrases (Cro 3/15 vs. Mex 3/15) included *hiding*.

Here are the examples of all the categories we had:

- 1) TOP – “to go inside a dark place, like a basement or a closet, somewhere you cannot be seen (you are hidden)”
- 2) CMP – “to ‘go’ because it is a movement verb and ‘in’ because in order to be hidden you need to ‘enter’ somewhere”
- 3) LEX – /
- 4) PPH – “when you don’t want to be found”
- 5) MIS – “there is an image of going into oneself and becoming hidden or invisible since there’s no one else but oneself”

In **the pictorial representations**, **the Croats** drew **2** topological drawings, **6** compositional drawings, and **7** visual paraphrases. **The Mexicans** drew **1** topological drawing, **5** compositional drawings, **8** visual paraphrases and **1** misinterpretation.

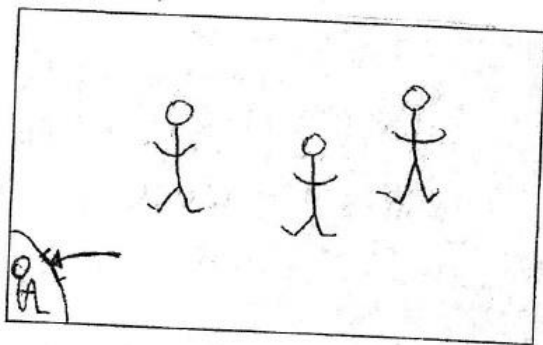
Topological drawings (Cro 2/15 vs. Mex 1/15) included *a person inside a place* and an arrow towards *in (direction)*. The movement was not visible and what was emphasised was

the particle *in*. Compositional drawings usually included *a person + go (motion) + into a place*, and sometimes a written *go* in it to make sure we understood the action. In one case, *the sun was going into the clouds*. The movement and the direction were shown by 3 arrows.

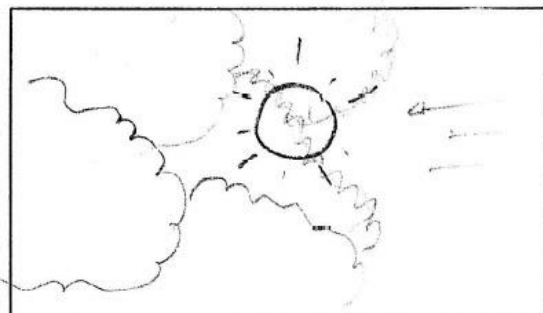
Unlike in the verbal answers, where both groups showed more tendencies towards topology and compositionality, here both groups showed more tendencies towards visual paraphrases (Cro 7/15 vs. Mex 8/15) and compositionality (Cro 6/15 vs. Mex 5/15). Visual paraphrases usually included *a person hiding* or in two separate cases - *a snail* and *the sun behind a cloud*.

Here are the examples of all the categories we had:

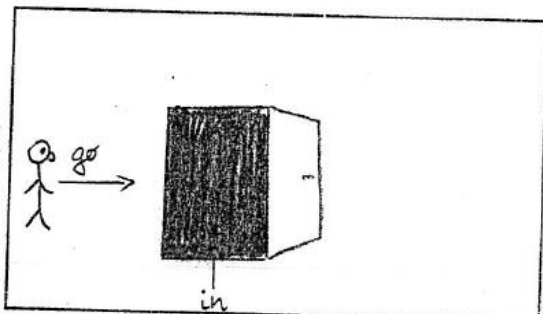
1) TOP



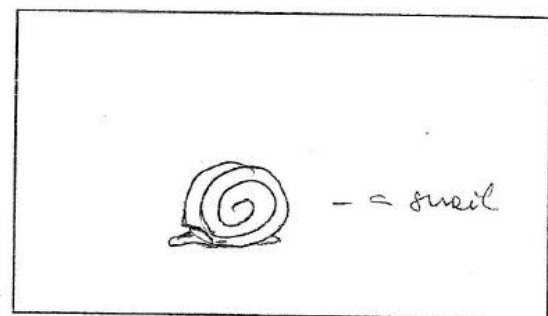
2) CMP 1



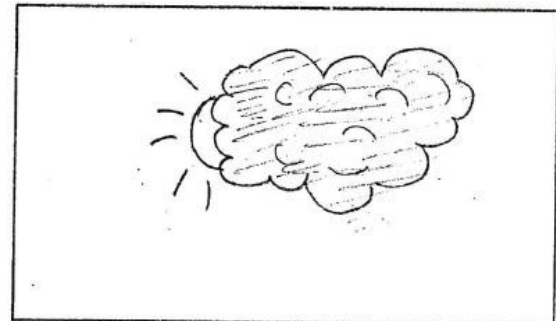
CMP 2



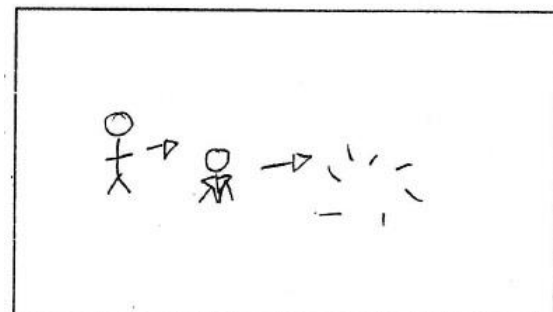
4) PPH 1



PPH 2



5) MIS



#### 2.3.1.1.1.2 *go in* ('be understood')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *go in* and its meaning 'be understood'.

In **the verbal answers**, among **the Croats** there were **6** topological answers, **7** compositional, and **2** paraphrases. **The Mexicans** gave **3** topological answers, **8** compositional answers, **2** paraphrases and **2** misinterpretations.

There were more answers referring to topology among the Croats (6/15) than among the Mexicans (3/15). The most prototypical answer included – *you/information/words + go + into somebody's brain/mind/head/ear* and *the person understands*. In the rest of the answers both groups showed more tendencies towards compositionality (Cro 7/15 vs. Mex 8/15). Those answers also included *you/information + into your brain/mind/head*. For the verb, they used synonyms like – *enter, get, move, and introduce*. In two cases (Mex 2/8 CMP) there was reverse viewing – *somebody gets inside your head and then understands*. There were paraphrases among both groups (Cro 2/15 vs. Mex 2/15). It was interesting to see that only the Mexicans had misinterpretations in their answers (Mex 2/15). Both answers included *being accepted into a group*<sup>2</sup>.

Here are the examples of all the categories we had:

- 1) TOP – “to go into your mind, into your head, which means that you understood it, unlike information that are outside your capability to understand them”
- 2) CMP – “when something gets inside your head and you process it, it means you have understood it”// “probably that someone is able to get inside your head and understand”
- 3) LEX – /
- 4) PPH – “if something goes in, it means that the person to whom it is referred to gets the point of it”
- 5) MIS – “enter in a social group or be accepted”

In **the pictorial representations**, **the Croats** drew **1** topological drawing, **9** compositional drawings, and **5** visual paraphrases. **The Mexicans** drew **0** topological drawings, **8** compositional drawings, **5** visual paraphrases, and **2** misinterpretations.

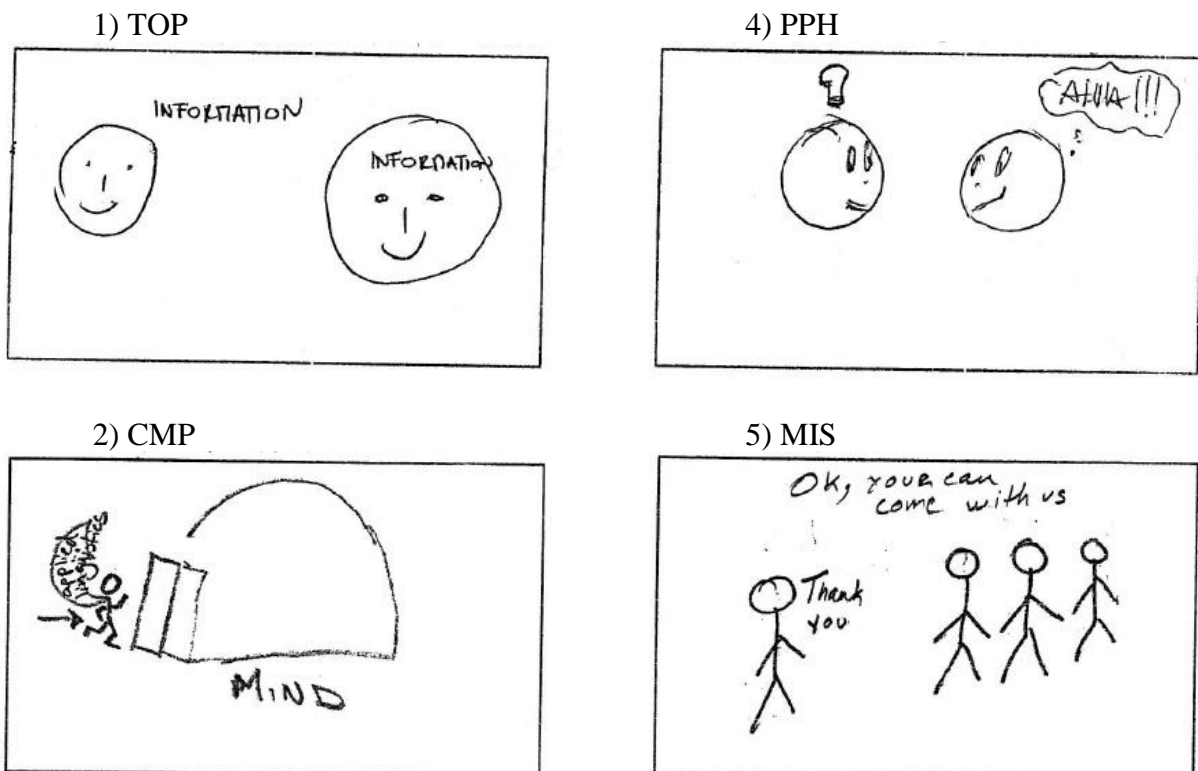
In the one topological drawing we had, there was first information *outside a person's head* and then *in the person's head* – without *go (motion)*. However, it was – spatial. Direction was implied.

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<sup>2</sup> There does not seem to be any correlation between this explanation and any such phrase in Spanish (RAE, 2017, Academia Mexicana de la Lengua, 2017)

Unlike in the verbal answers, where both groups showed more tendencies towards topology and compositionality, here both groups showed more tendencies towards compositionality (Cro 9/15 vs. Mex 8/15). Compositional drawings usually included *a person/information/words + go (motion) + into a person's head/brain*, and sometimes a written *go* in them to make sure we understood the action. Visual paraphrases (Cro 5/15 vs. Mex 5/15) included either a *people scenario (conversation)* or *a person understanding something*. It was interesting to see that only the Mexicans drew misinterpretations (Mex 2/15) which included – *a person being accepted into a group* just like in the verbal answers.

Here are the examples of all the categories we had:



### 2.3.1.1.1.3 *go out* ('stop burning')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *go out* and its meaning 'stop burning'.

In the verbal answers, among the Croats there were **3** topological answers, **6** compositional, **4** paraphrases, and **2** misinterpretations. The Mexicans gave **2** topological answers, **4** compositional answers, **1** lexical answer, **7** paraphrases and **1** misinterpretation.

There were 5 answers referring to topology (Cro 3/15 vs. Mex 2/15). They usually included *fire + go + out of somewhere*. Compositional answers (Cro 6/15 vs. Mex 4/15) included *go* described as movement and fire *moving/leaving + outside*. It was interesting to

see that some participants (Cro 4/15 vs. Mex 1/15) assigned the following meanings to the particle *out* – *negative, stop, gone, disappear, or finished*. Paraphrases (Cro 4/15 vs. Mex 7/15) included ‘stop burning’, *stop existing* and *fire disappearing*. Misinterpretations (Cro 2/15 vs. Mex 1/15) included *sparks going out of the fire*.

Here are the examples of all the categories we had:

- 1) TOP – “when a flame goes out, it is not in our existence anymore – it is out of it”
- 2) CMP – “if ‘go’ means movement, ‘out’ is opposite of inside, it makes sense because if something (fire) goes out it is not there”
- 3) LEX – “that the fire is no longer there that is gone [sic] ‘go’ is what gives me the clue”
- 4) PPH – “when the object that was burning finishes, then there’s nothing to burn”
- 5) MIS – “fire usually goes out: its force fades away – sparks go out and ‘leave’ the fire which then extinguishes”

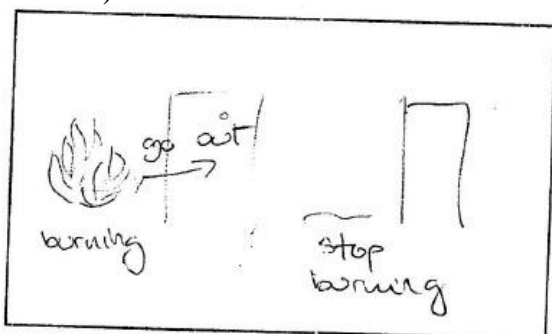
In **the pictorial representations, the Croats** drew **0** topological drawings, **5** compositional drawings, **8** visual paraphrases, and **2** misinterpretations. **The Mexicans** drew **0** topological drawings, **1** compositional, **2** lexical drawings, and **12** visual paraphrases.

There were no topological drawings and there was more compositionality among the Croats (Cro 5/15 vs. Mex 1/15). The most prototypical compositional answer included – *fire going out of a sphere of burning* or *out of a place through a door*. Lexical determination occurred only among the Mexicans and those drawings include *a personified fire* – it had *legs*. The participants clearly drew the verb, but the particle was not visible.

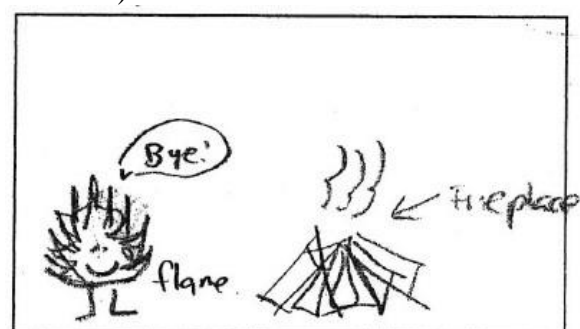
Just like in the verbal answers, here most of the pictorial representations were visual paraphrases (Cro 8/15 vs. Mex 12/15) of ‘stop burning’ – *candle scenarios, smoke leaving the logs* or *fire getting smaller*. It was interesting to see that misinterpretations occurred only among the Croats and they included *sparks going out of the fire*.

Here are the examples of all the categories we had:

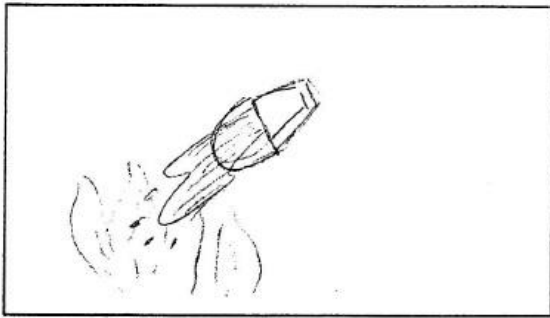
2) CMP



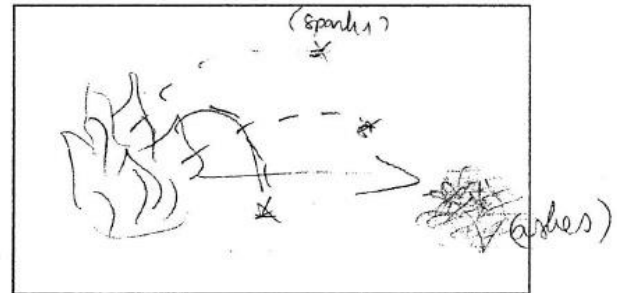
3) LEX



4) PPH



5) MIS



#### 2.3.1.1.1.4 *go out* ('stop being fashionable')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *go out* and its meaning 'stop being fashionable'.

In the verbal answers, among the Croats there were **6** topological answers, **6** compositional answers, and **3** paraphrases. The Mexicans gave **6** topological answers, **5** compositional answers, and **4** paraphrases.

There was an equal number of answers referring to topology among both groups (Cro 6/15 vs. Mex 6/15). The most prototypical answer included – *go + outside of (world of) fashion*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 6/15 vs. Mex 5/15). Compositionality also included – *out of fashion* and synonyms for *go* such as – *move (out)*. It was interesting to see that in their compositional answers 4 Croats and 3 Mexicans assigned the following meanings to the particle *out* – *unacceptable, unfashionable, end, to last no longer, exclude fashion*. Paraphrases (Cro 3/15 vs. Mex 4/15) included 'stop being fashionable'.

Here are the examples of all the categories we had:

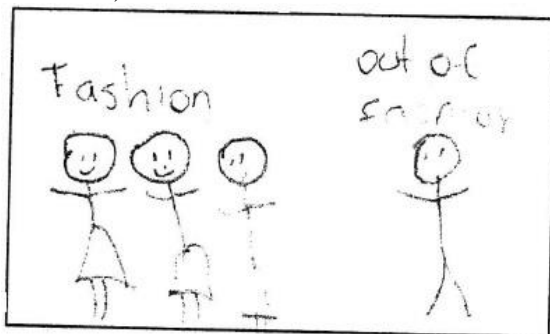
- 1) TOP – “when something goes out of fashion, it is no longer in the fashion”
- 2) CMP – “‘out’ is associated with some kind of an end, while ‘go’ is the process, the action, leaving the premises of the domain of ‘fashionable’ (out – outside)”
- 3) LEX – /
- 4) PPH – “something that used to be the usual, disappears gradually”
- 5) MIS – /

In the pictorial representations, the Croats drew **0** topological drawings, **9** compositional drawings and **6** visual paraphrases. The Mexicans drew **2** topological drawings, **6** compositional drawings, and **7** visual paraphrases.

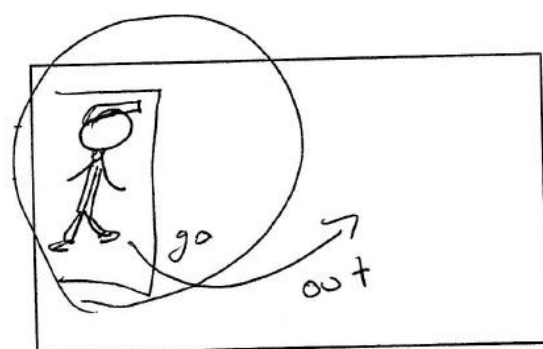
There were 2 topological answers (Mex 2/15). One included *a people scenario* – 3 people on the one side with *fashion* written above them and on the other side – *a person* with *out of fashion* written above him/her. The text in the picture explains *out* and there is no mention of *go*. The participant clearly focused only on the particle so this is topology. The second topological drawing included *a piece of clothing* + *out of the closet*. There is *an arrow* pointing from *the closet* towards *the piece of clothing*. *Out* is written above the piece of clothing. The motion is not visible here – there is no *go*. Compositionality (Cro 9/15 vs. Mex 6/15) included – *a person/a piece of clothing* + *going* + *out of the sphere of fashion* and sometimes *go* was written in the drawing to make sure we understood the action. The rest of the answers were primarily visual paraphrases (Cro 6/15 vs. Mex 7/15) of *unfashionable*.

Here are the examples of all the categories we had:

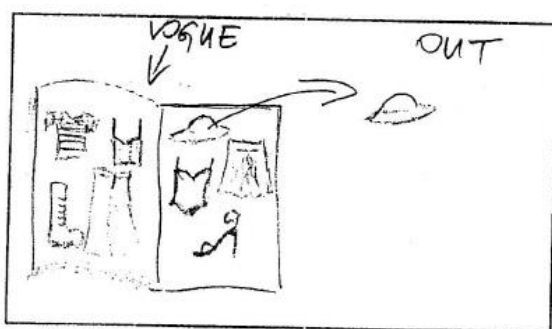
1) TOP



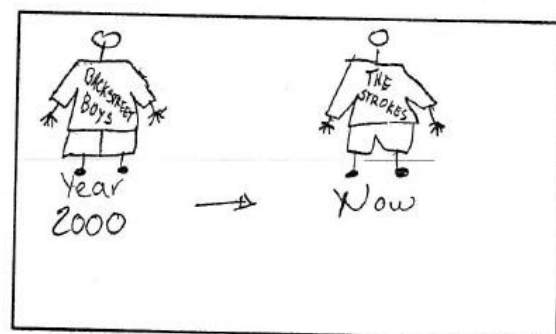
CMP 2



2) CMP 1



4) PPH



### 2.3.1.1.1.5 Discussion and Conclusions: *go in* and *go out*

Most of the verbal answers for *go in* and all its meaning ('become hidden'; 'be understood') included a lot of topology and compositionality among both groups (Table 1). The rest of the answers were mostly paraphrases. Misinterpretations occurred only among the Mexicans. Reverse viewing occurred only with *go in* ('be understood') and only among the Mexicans.



Table 1. Results of the verbal answers for the PV *go in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and <i>IN</i>	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
GO IN ('become hidden')	5	7	-	3	-	-	5	6	-	3	1	-
GO IN ('be understood')	6	7	-	2	-	-	3	8	-	2	2	-

The same can be said about *go out* and all its meanings ('stop burning'; 'stop being fashionable'). Both groups showed tendencies towards topology and compositionality (Table 2). Paraphrases occurred more among the Mexicans. Misinterpretations occurred only with the first meaning of *go out*. Some participants assigned the following meanings to the particle *out* – *negative, stop, gone, disappear, or finished* and *unacceptable, unfashionable, end, to last no longer, exclude fashion*. It was more typical for the Croats.

Table 2. Results of the verbal answers for the PV *go out*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and <i>OUT</i>	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
GO OUT ('stop burning')	3	6	-	4	2	-	2	4	1	7	1	-
GO OUT ('stop being fashionable')	6	6	-	3	-	-	6	5	-	4	-	-

However, in the drawings of *go in* and all its meanings, there was significantly more compositionality than topology (Table 3). Unlike in the verbal answers, there were more visual paraphrases here among both groups. Misinterpretations occurred only among the Mexicans. *Reverse viewing* occurred only with *go in* ('be understood') and only among the Mexicans.

Table 3. Results of the pictorial representations of the PV *go in*

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and <i>IN</i>	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
GO IN ('become hidden')	2	6	-	7	-	-	1	5	-	8	1	-
GO IN ('be understood')	1	9	-	5	-	-	-	8	-	5	2	-

In the drawings of *go out* and its meanings, not only was there barely any topology, but compositionality occurred significantly more among the Croats than among the Mexicans (Table 4). Lexical determination occurred only among the Mexicans with the first meaning of *go out*. Visual paraphrases occurred significantly more than in the verbal answers, especially among the Mexicans. Misinterpretations occurred only among the Croats with the first meaning of *go out*.

Table 4. Results of the pictorial representations of the PV *go out*

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
GO OUT ('stop burning')	-	5	-	8	2	-	-	1	2	12	-	-
GO OUT ('stop being fashionable')	-	9	-	6	-	-	2	6	-	7	-	-

It is important to mention that a problem was encountered when approaching the verb *go* in the drawings because *go* in itself is *motion*. In comparison to the other PVs, it is visible that what would usually be considered topological does not apply with *go*. If there is a person or an object in one sphere and an arrow pointing towards the other sphere, we cannot ignore that the arrow also represents motion/action. Especially if, for example, we see an object both inside a sphere and then immediately outside of it. It shows us that the participants did try to include the verb into the drawing. Thus, it was decided that the drawings of both *go in* and *go out* would be considered topological only if the object is already *inside* or *outside* and an arrow is pointing from the other sphere towards it. The arrow then represents only the direction, only the particle.

### 2.3.1.1.2 *take in and take out*

In the next section we analyse the verbal answers and pictorial representations of the PVs *take in* and *take out* and their meanings. Overall there were 149 verbal answers and 149 pictorial representations.

There were 89 verbal answers and 89 pictorial representations of *take in*. We analysed the following meanings:

- 1) 'deceive, make somebody believe something that is not true';
- 2) 'understand and absorb something';
- 3) 'make a piece of clothing narrower or tighter'.

There were 60 verbal answers and 60 pictorial representations of *take out*. We analysed the following meanings:

- 1) ‘obtain an official document or a service’;
- 2) ‘kill somebody’.

#### 2.3.1.1.2.1 *take in* (‘deceive, make somebody believe something that is not true’)

There were **30/30** answers in both verbal and pictorial representations of the particle verb *take in* and its meaning ‘deceive, make somebody believe something that is not true’.

In **the verbal answers**, among **the Croats** there were **5** topological answers, **8** compositional, **1** paraphrase and **1** misinterpretation. **The Mexicans** gave **3** topological answers, **10** compositional, **1** lexical answer, and **1** misinterpretation.

There were more answers referring to topology among the Croats (5/15) than among the Mexicans (3/15). The most prototypical answer included – *take + somebody + into the world of lies/deception*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 8/15 vs. 10/15). Those answers included – *take/put/absorb/accept* and *into a lie/deception* or less frequently *reverse viewing – taking a lie into your mind/head* (Cro 1/8 CMP vs. Mex 3/10 CMP).

Here are the examples of all the categories we had:

- 1) TOP – “you take somebody in your world of lies”
- 2) CMP – “‘take’ somebody ‘into’ your world of lies and making them believe it is real and true; ‘in’ – the lie, ‘take’ – the process of deceiving”// “you **put** your lies inside somebody’s head”
- 3) LEX – “you are fabricating a lie and anyone that believes it is ‘taking’ your fabrication and regards it as true”
- 4) PPH – “if you take somebody in, you make them believe something that is a pure fabrication, and you obtain their confidence”
- 5) MIS – “lay a trap for someone”

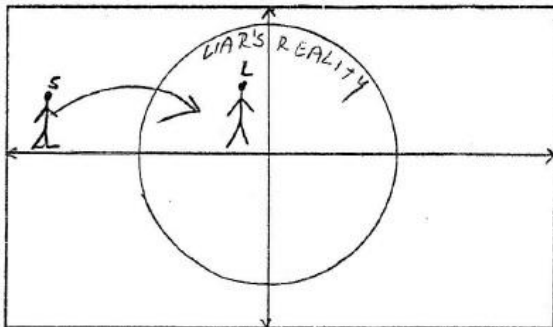
In **the pictorial representations**, **the Croats** drew **5** topological drawings, **5** compositional drawings, and **5** visual paraphrases. **The Mexicans** drew **1** topological drawing, **5** compositional, **8** visual paraphrases and **1** misinterpretation.

All topological drawings included *2-people scenarios*. 4/6 drawings (Cro 4/5 TOP) included *a person going into a sphere of lies*, and 2/6 included *reverse viewing* where *lies* were going *into a person’s head* (Cro 1/5 TOP vs. Mex 1/1 TOP). A *2-people scenario* usually demonstrated compositionality (Cro 5/15 vs. MEX 5/15) as well – *a person taking*

somebody by the hand into the world of lies or a person calling somebody into the world of lies (i.e. call=take). Only 1 compositional drawing included reverse viewing (Cro 1/5 CMP). Unlike in the verbal answers, here The Mexicans showed more tendencies towards compositionality and visual paraphrases. Visual paraphrases (Cro 5/15 vs. Mex 8/15) usually included different *people scenarios + lie/deceit*.

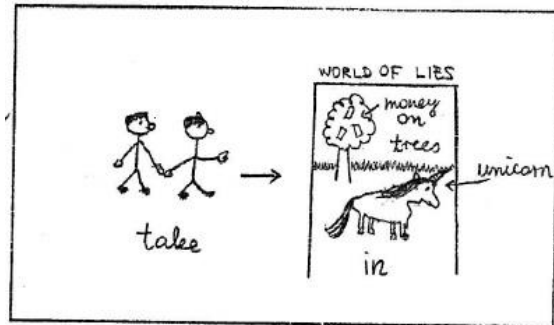
Here are the examples of all the categories we had:

1) TOP

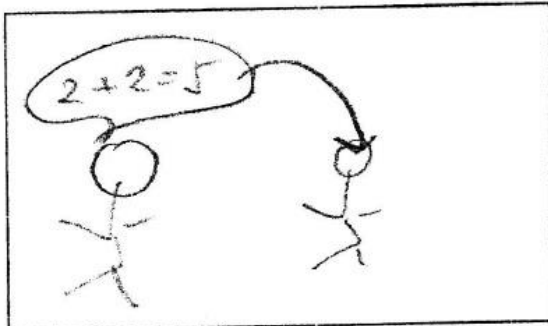


TOP - reverse

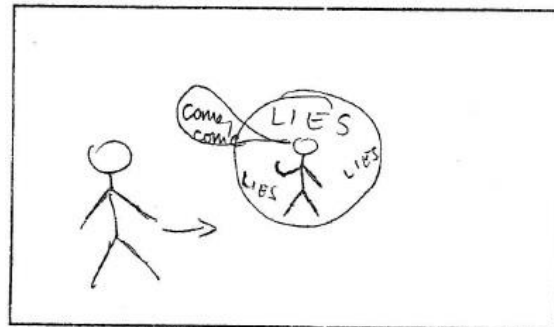
2) CMP - take



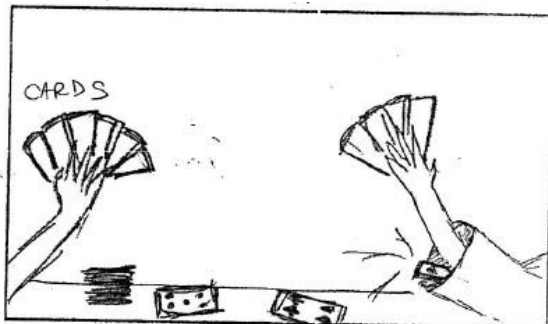
CMP - call (=take)



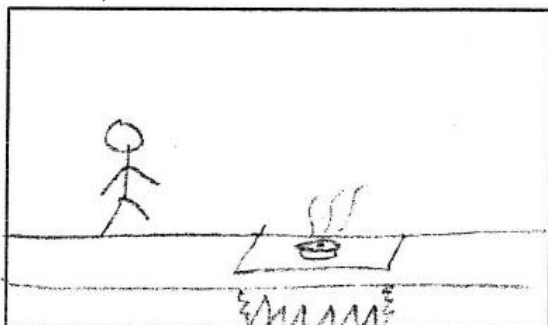
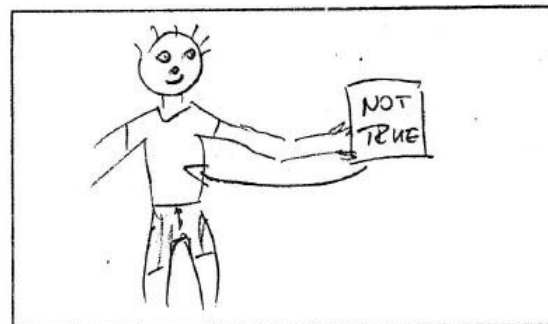
4) PPH



CMP - reverse



5) MIS



#### 2.3.1.1.2.2 *take in* ('understand and absorb something')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *take in* and its meaning 'understand and absorb something'.

In **the verbal answers**, among **the Croats** there were **5** topological answers, **9** compositional, and **1** paraphrase. **The Mexicans** gave **4** topological answers, **9** compositional, and **2** paraphrases.

There were 9 answers referring to topology (Cro 5/15 vs. Mex 4/15). The most prototypical answer included – *take + something/information/knowledge + inside/into your head/mind/brain/yourself*. In the rest of the answers both groups showed more tendencies towards compositionality (Cro 9/15 vs. Mex 9/15). Those answers included – *take something/information/knowledge and put it inside/into your head/mind/brain* or just simply – *put/absorb/accept/grasp/bring/integrate + something + inside your head*.

Here are the examples of all the categories we had:

- 1) TOP – “take the info/knowledge into the mind”
- 2) CMP – “the information you see can be understood only if you take that information and put it inside your own knowledgebase”
- 3) LEX – /
- 4) PPH – “make it a part of your own world of ideas”
- 5) MIS – /

In **the pictorial representations**, **the Croats** drew **9** topological drawings, **4** compositional drawings, and **2** visual paraphrases. **The Mexicans** drew **5** topological drawings, **3** compositional, and **7** visual paraphrases.

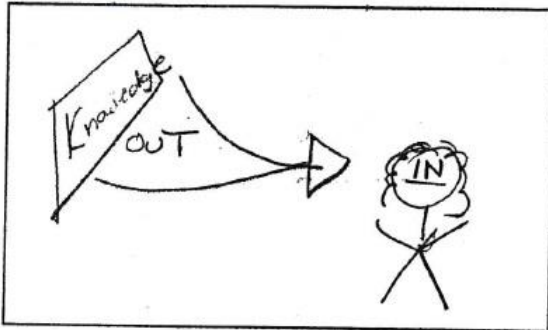
There were more topological drawings among the Croats (9/15) than among the Mexicans (5/15). The Croats also presented more topological drawings than topological answers. The most prototypical drawing in both groups included – *something/information going into a person's head*. Compositionality (Cro 4/15 vs. 3/15) was usually demonstrated by *a person taking information into their head*. In two cases (Cro 1/4 CMP vs. Mex 1/5 TOP) there was *a sponge scenario*. The first one included *a sponge taking in liquid* – *take* was written in the drawing. The second one included *a personified sponge with outstretched arms and 'learning' going in*. None of the two were considered a paraphrase because they referred to *taking in knowledge* (in the former, an explanation was written in the verbal answer; thus, an exception was made). Also, we could argue that the second case was compositional because *a sponge* in itself represents absorbing or taking but due to the fact it was personified, and the arms/hands were not physically *taking* the knowledge *in*, then this is more topological

than compositional. In one example (Cro 1/2 PPH) only *a sponge* was pictured and this was categorized as a paraphrase.

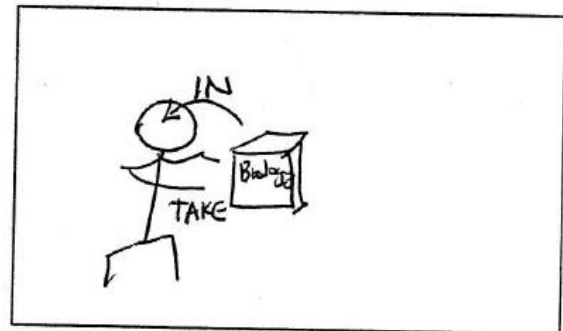
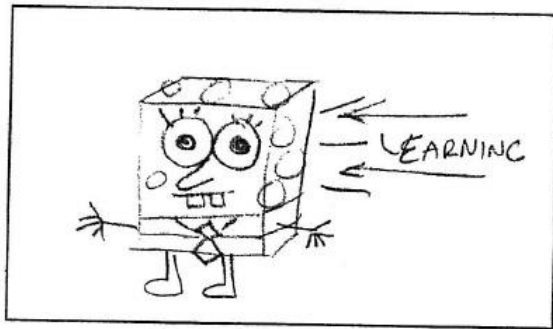
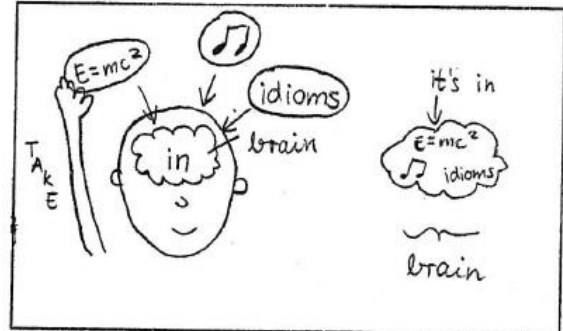
Unlike in the verbal answers, here the Croats showed more tendencies towards topology (Cro 9/15) and the Mexicans towards topology (Mex 5/15) and visual paraphrases (Cro 2/15 vs. Mex 7/15). Visual paraphrases usually included *studying* or *school scenarios*.

Here are the examples of all the categories we had:

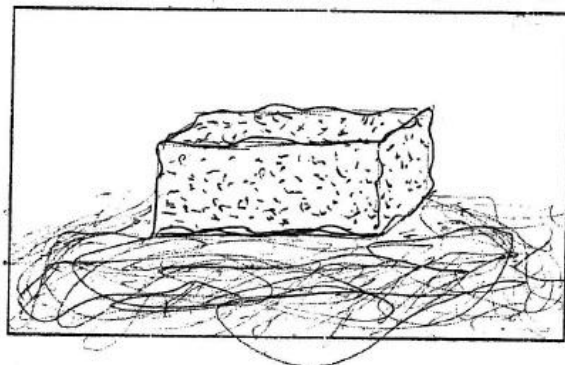
1) TOP 1 and 2



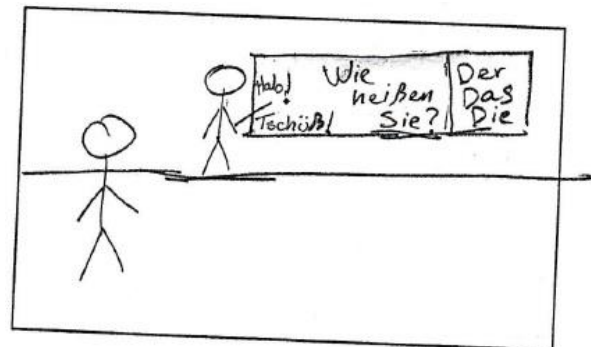
2) CMP 1 and 2



4) PPH



PPH 2



### 2.3.1.1.2.3 *take in* ('make a piece of clothing narrower or tighter')

There were **29/30** answers in both verbal and pictorial representations of the particle verb *take in* and its meaning 'make a piece of clothing narrower or tighter'.

In **the verbal answers**, among **the Croats** there was **1** topological answer, **8** compositional answers, **5** paraphrases and **1** misinterpretation. **The Mexicans** gave **1** topological answer, **4** compositional, **5** paraphrases, **4** misinterpretations and **1** no text.

There were only 2 answers referring to topology (Cro 1/15 vs. Mex 1/14). Both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 4/14) and paraphrases (Cro 5/15 vs. 5/14)). Both topological and compositional answers included – *take + clothes +/and inside/towards the inside of it(self)*. Compositional answers also included synonyms of *take* like – *pull, drive, and bring*. Paraphrases usually included *clothes* becoming *narrower* or *tighter*. There were more misinterpretations among the Mexicans (Mex 4/14 vs. Cro 1/15).

Here are the examples of all the categories we had:

- 1) TOP – “piece of clothing taking itself inside itself so as to be tighter or narrower”
- 2) CMP – “when you want to narrow a T-shirt, you have to ‘take’ the material at the sides and pull it ‘in’ – towards the inside of the shirt”
- 3) LEX – /
- 4) PPH – “to do that you must cut or ‘doblar<sup>3</sup>’ the clothing”
- 5) MIS – “when you take your shirt and tuck it inside your pants the clothes get tighter”

In **the pictorial representations**, **the Croats** drew **5** topological, **1** compositional, **8** visual paraphrases and **1** misinterpretation. **The Mexicans** drew **2** topological drawings, **0** compositional, **8** visual paraphrases, and **4** misinterpretations and **1** no picture.

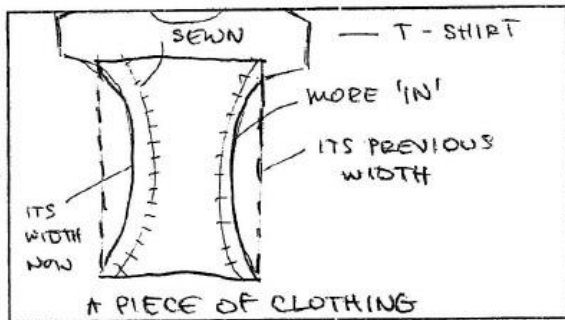
Topology (Cro 5/15 vs. Mex 2/14) included – *a piece of clothing and an arrow (direction) going from the previous size inwards to the new size*. The Mexicans included *a person* in their drawings (Mex 2/2 TOP). The one compositional drawing (Cro 1/15) was the same as the topological ones; with *take* written in it to make sure we understood it. Unlike in the verbal answers, where there was more compositionality than topology, here there was more topology (Cro 5/15 vs. Mex 2/14) than compositionality (Cro 1/15 vs. Mex 0/14). However, both groups showed more tendencies towards visual paraphrases (Cro 8/15 vs. Mex 8/14). They usually included a piece of clothes getting *narrower* or *tighter*, *but also cut + clothes*. Misinterpretations occurred more among the Mexicans (Mex 4/14 vs. Cro 1/1).

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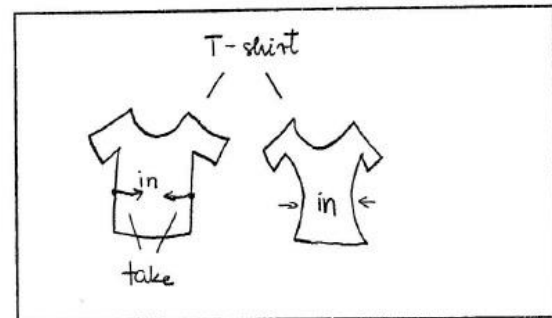
<sup>3</sup> to fold. (Oxford, 2017)

Here are the examples of all the categories we had:

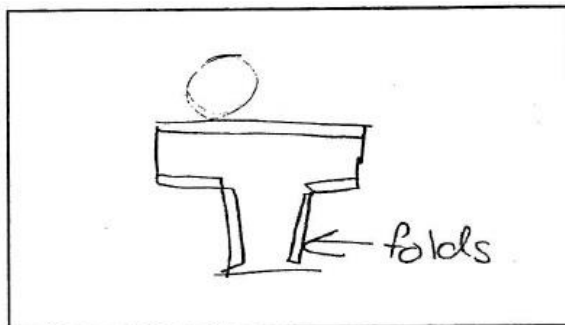
1) TOP



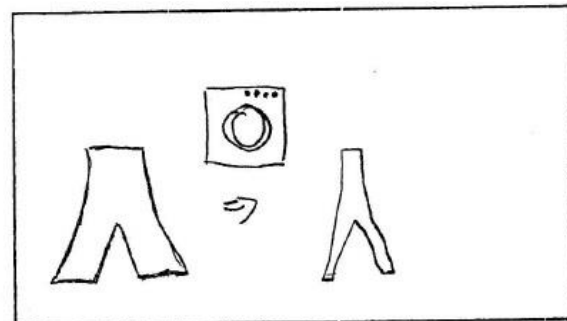
2) CMP



4) PPH



5) MIS



#### 2.3.1.1.2.4 *take out* ('obtain and official document or a service')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *take out* and its meaning 'obtain an official document or a service'.

In **the verbal answers**, among **the Croats** there were **3** topological answers, **11** compositional answers, and **1** paraphrase. **The Mexicans** gave **3** topological answers, **4** compositional answers, **6** paraphrases and **2** misinterpretations.

There were 6 topological answers about *take out* in this meaning (Cro 3/15 vs. Mex 3/15). The most prototypical answer included – *take something/a document + out of an institution/office/drawer*. The fact that it was official was important to mention somehow or it was implied by *the office/institution*. In the rest of the answers, the Croats showed more tendencies towards compositionality (Cro 11/15) and the Mexicans towards compositionality (Mex 4/15) and paraphrases (Cro 1/15 vs. Mex 6/15). Compositional answers also included – *take + a document and out of an institution/office/ drawer*.

Here are the examples of all the categories we had:

1) TOP – “as institutions or the government are the ones in charge to emit official documents, we might infer that the metaphor relies upon the fact that one must take the document out of the actual building to, then, use it”



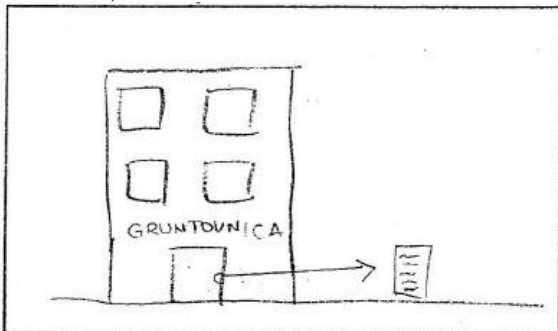
- 2) CMP – “take – action of getting something, out – getting something from someone, out of someone”
- 3) LEX – /
- 4) PPH – “when people get their drivers licence or they divorce, but it is official and accepted by law”
- 5) MIS – “extracting something valuable after some kind of effort”

In **the pictorial representations, the Croats** drew **2** topological drawings, **8** compositional, and **5** visual paraphrases. **The Mexicans** drew **1** topological drawing, **7** compositional drawings, **2** lexical drawings, **3** visual paraphrases and **2** misinterpretations.

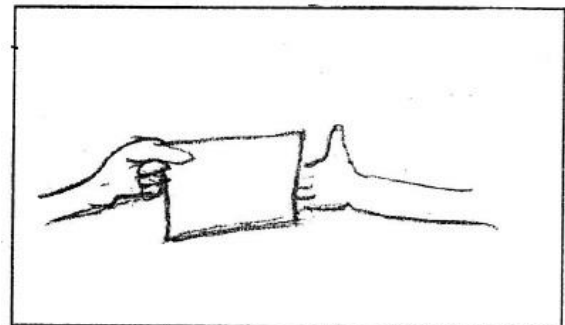
Topological drawings (Cro 2/15 vs. Mex 1/15) included – *a document going out of an institution*. Unlike in the verbal answers, where the Croats showed more tendencies towards compositionality and topology and the Mexicans towards paraphrasing the meaning and compositionality, here both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 7/15). Compositionality was usually demonstrated by – *a hand (take)/a person + document + out of an institution/window/drawer*. Visual paraphrases occurred among both groups (Cro 5/15 vs. Mex 3/15). It was interesting to see that the Mexicans, unlike the Croatian students, drew lexical drawings (2/15) and misinterpretations (2/15).

Here are the examples of all the categories we had:

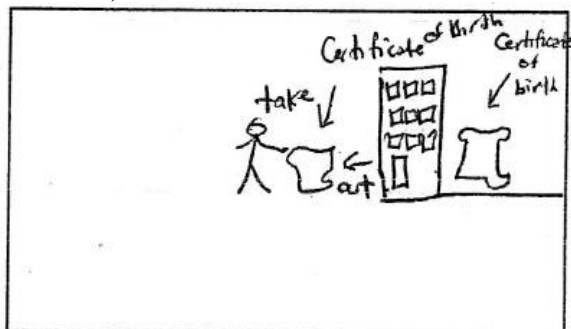
1) TOP



3) LEX



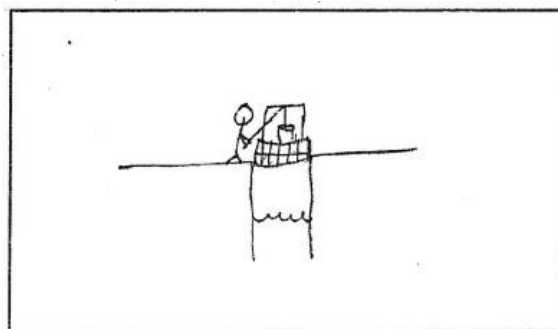
2) CMP



4) PPH



5) MIS



#### 2.3.1.1.2.5 *take out* ('kill somebody')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *take out* and its meaning 'kill somebody'.

In **the verbal answers**, among **the Croats** there were **9** topological answers, **5** compositional answers, and **1** paraphrase. **The Mexicans** gave **7** topological answers, **6** compositional answers, and **2** paraphrases.

There were more answers referring to topology among the Croats (9/15) than among the Mexicans (7/15). The most prototypical answer included – *take + somebody + out of life/out of the state of living/out of the world* (Cro 4/9 TOP vs. Mex 5/7 TOP), or *reverse viewing – take + life/heart/soul/life essence/vital force + out of somebody* (Cro 5/9 TOP vs. Mex 2/7 TOP). In the rest of the answers both groups showed more tendencies towards compositionality (Cro 5/15 vs. Mex 6/15). Those answers also included – *somebody + out of life/world (of living)/sphere of life* (Cro 4/5 CMP vs. Mex 4/6 CMP) and *reverse viewing – life + out of somebody* (Cro 1/5 CMP vs. Mex 2/6 CMP). Compositional answers included synonyms for *take* such as – *put, place, pull, carry, and drive (out)*. It was interesting to see that 3 Croats assigned the following meanings to the particle *out* – *absence* and *dead*. All paraphrases (Cro 1/15 vs. Mex 2/15) included references to life leaving the body.

Here are the examples of all the categories we had:

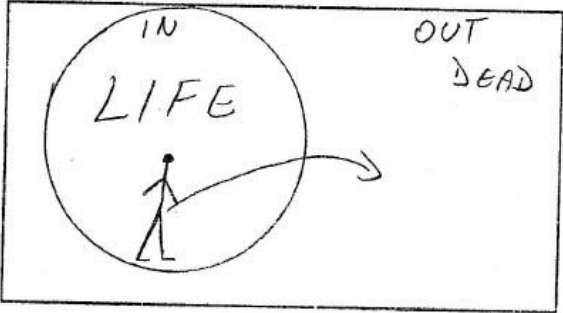
- 1) TOP – “to take somebody outside of the scene of life” // “take the life out of somebody’s body”
- 2) CMP – “‘take’ somebody’s life – to kill somebody (e.g. pull somebody’s heart out, you ‘take’ it); ‘out’ – dead – outside the world of the living”
- 3) LEX – /
- 4) PPH – “when you grab someone’s life away from the owner”
- 5) MIS – /

In the pictorial representations, the Croats drew 3 topological drawings, 4 compositional drawings, 8 visual paraphrases. The Mexicans drew 2 topological drawings, 3 compositional drawings, and 10 visual paraphrases.

The most prototypical topological drawing included – a person going out of the sphere of life (Cro 2/3 TOP vs. Mex 1/2 TOP) or reverse viewing – life going out of a person’s body (Cro 1/3 TOP vs. Mex 1/2 TOP). Compositional drawings included – somebody taking a person out of life (Cro 1/4 CMP vs. Mex 3/3 CMP) or somebody taking life out of a person (Cro 3/4 CMP vs. Mex 0/3 CMP). Unlike in the verbal answers, where most answers were topological or compositional, here both groups showed more tendencies towards visual paraphrases (Cro 8/15 vs. Mex 10/15). They included different people scenarios, a person killing somebody with a gun, a soul leaving the body, tombstones, and alive vs. dead images.

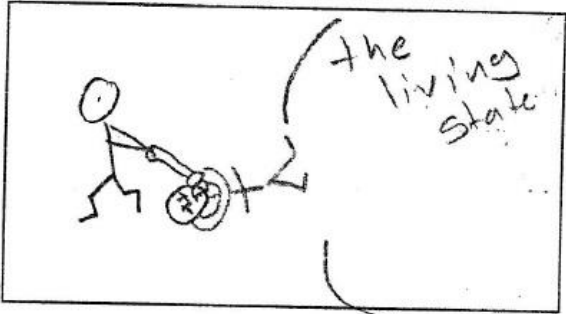
Here are the examples of all the categories we had:

1) TOP

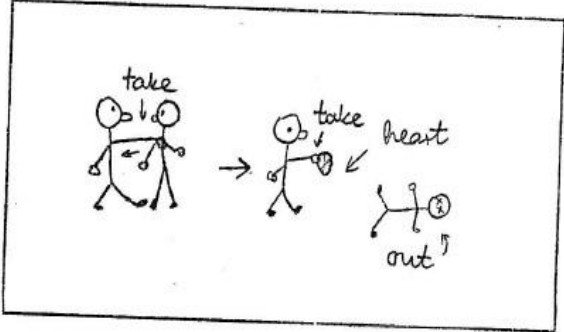
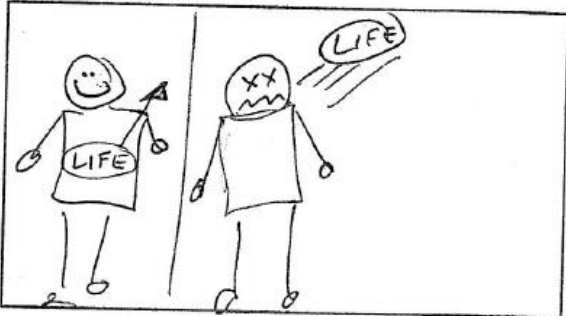


TOP – reverse

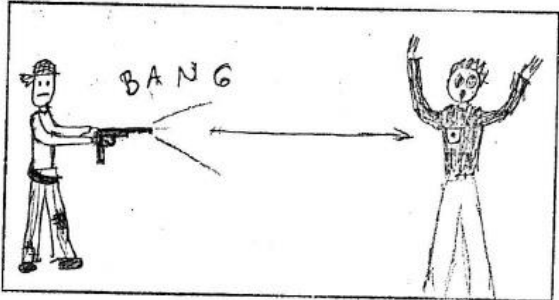
2) CMP



CMP – reverse



4) PPH



### 2.3.1.1.2.6 Discussion and Conclusions: *take in* and *take out*

The verbal answers for *take in* and all its meanings (‘deceive, make somebody believe something that is not true’; ‘understand and absorb something’; ‘make a piece of clothing narrower or tighter’) included more compositionality than topology (Table 5). Topology occurred more with the first two meanings of *take in*. Compositionality occurred equally among both groups in the answers for the first two meanings, but with the third one, it was more typical for the Croats. There was also *reverse viewing* – it occurred with the first meaning of *take in* and more so among the Mexicans. Lexical determination occurred only once among the Mexicans in the first meaning of *take in*. Paraphrases occurred among both groups. Misinterpretations occurred more among the Mexicans.

Table 5. Results of the verbal answers for the PV *take in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>TAKE IN</b> (‘deceive, make somebody believe something that is not true’)	5	8	-	1	1	-	3	10	1	-	1	-
<b>TAKE IN</b> (‘understand or absorb something’)	5	9	-	1	-	-	4	9	-	2	-	-
<b>TAKE IN</b> (‘make a piece of clothing narrower or tighter’)	1	8	-	5	1	-	1	4	-	5	4	1

In the verbal answers for *take out* and all its meanings (‘obtain an official document or a service’; ‘kill somebody’), it is visible that there was more topology with the second meaning (Table 6). In the answers for the first meaning of *take out*, compositionality was more typical for the Croats, but that cannot be said for *take out* (‘kill somebody’), where both groups showed equal tendencies towards compositionality. Both groups also showed tendencies towards *reverse viewing* in all three categories of *take out* (‘kill somebody’) we had, but in topological answers it occurred more among the Croats. The Mexicans showed more tendencies towards paraphrasing the meaning. Misinterpretations occurred with the first meaning of *take out* and only among the Mexicans. Some participants assigned the following meanings to the particle *out* – *absence* and *dead*. It occurred only among the Croats.

Table 6. Results of the verbal answers for the PV take out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
TAKE OUT (‘obtain an official document or a service’)	3	11	-	1	-	-	3	4	-	6	2	-
TAKE OUT (‘kill somebody’)	9	5	-	1	-	-	7	6	-	2	-	-

However, in the pictorial representations of *take in*, topology occurred significantly more among the Croats, while compositionality occurred almost equally among both groups. There was also *reverse viewing* – it occurred with the first meaning of *take in* and it occurred among both groups. Visual paraphrases and misinterpretations occurred more among the Mexicans (Table 7).

Table 7. Results of the pictorial representations of the PV take in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
TAKE IN (‘deceive, make somebody believe something that is not true’)	5	5	-	5	-	-	1	5	-	8	1	-
TAKE IN (‘understand or absorb something’)	9	4	-	2	-	-	5	3	-	7	-	-
TAKE IN (‘make a piece of clothing narrower or tighter’)	5	1	-	8	1	-	2	-	-	8	4	1

In the pictorial representations of *take out*, there were no significant differences between the two groups in terms of topology and compositionality. However, unlike in the verbal answers, in the drawings of *take out* (especially with – ‘kill somebody’) there was less topology among both groups. Compositionality occurred more with *take out* (‘obtain an official document or a service’). Both groups also showed tendencies towards *reverse viewing*. It occurred more among the Croats. Unlike in the verbal answers, there were 2 lexical drawings among the Mexicans. Visual paraphrases occurred significantly more than in the verbal answers. Misinterpretations occurred only among the Mexicans (Table 8).

Table 8. Results of the pictorial representations of the PV take out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
TAKE OUT (‘obtain an official document or a service’)	2	8	-	5	-	-	1	7	2	3	2	-
TAKE OUT (‘kill somebody’)	3	4	-	8	-	-	2	3	-	10	-	-

### 2.3.1.1.3 *put in and put out*

In the next section we analyse the verbal answers and pictorial representations of the PVs *put in* and *put out* and their meanings. Overall there were 329 verbal answers and 329 pictorial representations.

There were 120 verbal answers and 120 pictorial representations of *put in*. We analysed the following meanings:

- 1) ‘officially make a claim for something’;
- 2) ‘spend time or effort doing something’;
- 3) ‘elect a political party as the government’;
- 4) ‘interrupt’.

There were 209 verbal answers and 209 pictorial representations of *put out*. We analysed the following meanings:

- 1) ‘injure your back, shoulder, hip etc.’;
- 2) ‘extinguish, stop from burning’;
- 3) ‘make a figure or a result wrong’;
- 4) ‘make somebody go to sleep or unconscious’;
- 5) ‘broadcast, publish or issue’;
- 6) ‘switch something off’;
- 7) ‘make trouble, problems, extra work’.

#### 2.3.1.1.3.1 *put in* (‘officially make a claim for something’)

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put in* and its meaning ‘officially make a claim for something’.

In the verbal answers, among the Croats there were 5 topological answers, 8 compositional answers, 1 paraphrase and 1 misinterpretation. The Mexicans gave 2 topological answers, 6 compositional answers, 4 paraphrases and 3 misinterpretations.

There were more answers referring to topology among the Croats (5/15) than among the Mexicans (2/15). The most prototypical answer included – *a claim (a request) or a piece of paper + put either into an office/institution, into the official box or into a computer (computer = official)*. The fact that it was official was important to mention somehow or it was implied by *the office/institution*. However, in the rest of the answers both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 6/15). Those answers also included – *claim + into + a place*. For the verb, they used synonyms like – *place, insert, enter, get, bring, and deliver*. Paraphrases included ‘officially make a claim for something’ (Cro 1/15 vs. Mex 4/15).

Here are the examples of all the categories we had:

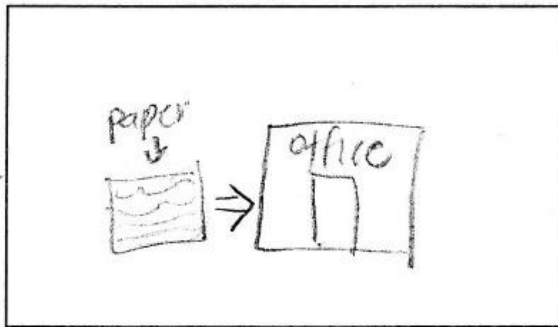
- 1) TOP – “you put your claim for something in a place appropriate for dealing with claims; an office, for example”
- 2) CMP – “‘put’ – to put your request on the table, to make it known so that it can be considered; ‘in’ – the institution in which you’re making a request – the place where you put your claim so that it can be reviewed”
- 3) LEX – /
- 4) PPH – “to put in means to demand certain rights from the authorities”
- 5) MIS – “when someone says something that others are not sure about”

In the pictorial representations, the Croats drew 3 topological drawings, 6 compositional drawings, 1 lexical drawing and 5 visual paraphrases. There were no misinterpretations. The Mexicans drew 2 topological drawings, 5 compositional drawings, 2 lexical drawings, 2 visual paraphrases, and 4 misinterpretations.

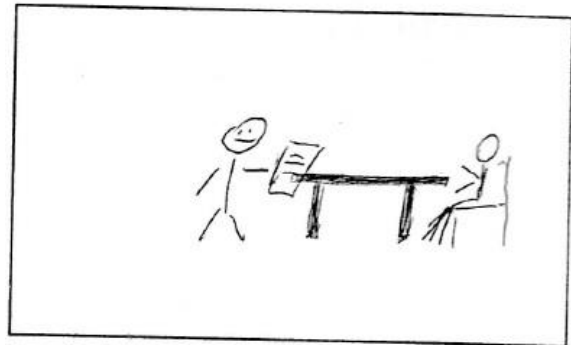
In the 2/5 topological answers (out of all 30 drawings) there was *a claim going into an institution* (Cro 1/3 TOP vs. Mex 1/2 TOP), and in 3/5 there was a *claim-box scenario* (Cro 2/3 TOP vs. Mex 1/2 TOP). Just like in the verbal answers, both the Croats and the Mexicans showed more tendencies towards showing us both the verb and the particle (Cro 6/15 vs. Mex 5/15). Compositionality was usually demonstrated by – *a hand (put) + claim or a person holding a claim and putting it into a place/box, or a claim going into a place* but the verb was written to emphasize the action as well. Visual paraphrases (Cro 5/15 vs. Mex 2/15) included *writing/typing a claim* or a drawing of *a claim*. It was interesting to see that the Mexicans, unlike the Croatian students, had misinterpretations (4/15) in their pictorial representations.

Here are the examples of all the categories we had:

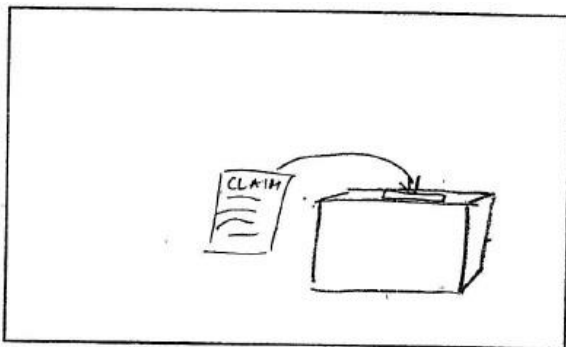
1) TOP



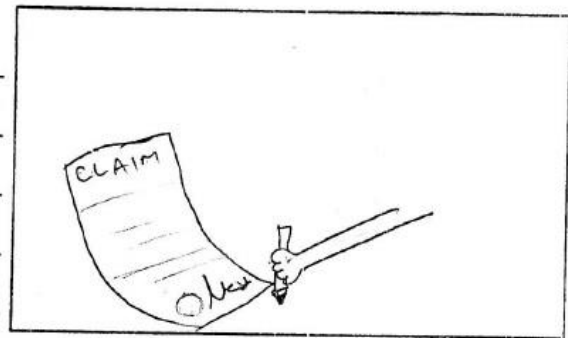
3) LEX



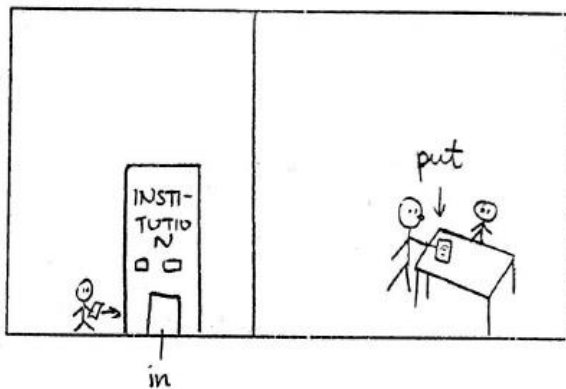
TOP 2



4) PPH



2) CMP



5) MIS



### 2.3.1.1.3.2 *put in* ('spend time or effort doing something')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put in* and its meaning 'spend time or effort doing something'.

In **the verbal answers**, among **the Croats** there were **6** topological answers, **8** compositional answers and **1** misinterpretation. **The Mexicans** gave **6** topological answers, **6** compositional answers, **1** lexical answer and **2** paraphrases.



There were 12 topological answers about *put in* in this meaning (Cro 6/15 vs. Mex 6/15). The most prototypical answer included *time* and/or *effort* – *time* or *effort* were *put into something, into an activity, situation, or a process*. Or less frequently it included *putting yourself/a part of yourself into* the above-mentioned containers. In the rest of the answers both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 6/15). Those answers also included *time* and/or *effort* + *into something*. For the verb, they used synonyms like: *place, take, give, include, invest, and set*. Paraphrases occurred only among the Mexicans (Cro 0/15 vs. Mex 2/15).

Here are the examples of all the categories we had:

- 1) TOP – “when you want to do something successfully, you have to put some time and effort in the action of doing that”
- 2) CMP – “to put means to invest (time) and ‘in’ means into something”
- 3) LEX – “you are placing one part of your time to spend it doing a particular thing”
- 4) PPH – “to put in anything in your power in order to finish something”
- 5) MIS – “out is irrelevant to our reality but if we put something from the outside world IN our reality we give it our time and effort”

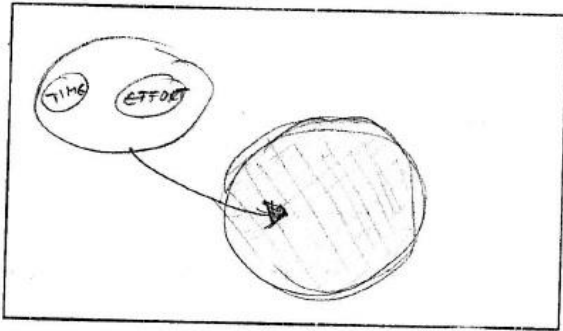
In **the pictorial representations, the Croats** drew **3** topological drawings, **5** compositional drawings, **6** visual paraphrases and **1** misinterpretation. The Mexicans drew **0** topological drawings, **9** compositional drawings and **6** visual paraphrases.

In 2/3 topological answers the Croats provided, *time* and *effort* were going *into a container*, and the other pictorial representation did not include any words but just showed something going *into (direction)* a container.

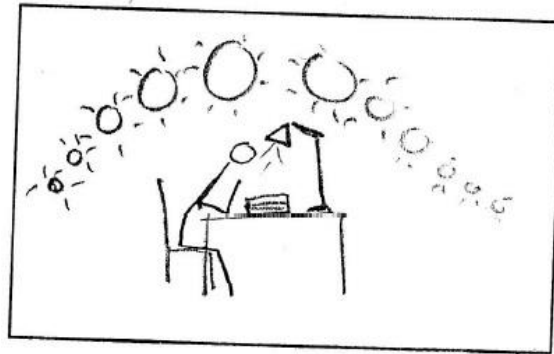
Unlike in the verbal answers, where most answers were either topological or compositional, here most of the representations were either compositional (Cro 5/15 vs. Mex 9/15) or visual paraphrases (Cro 6/15 vs. Mex 6/15). Both the Croats and the Mexicans usually demonstrated compositionality by *a person* holding a container denoting *time/effort* (i.e. *put* + *time/effort*) and going towards another container with or without an arrow (*direction*) and sometimes the verb was written to emphasize the action as well. Visual paraphrases usually included *doing something* that requires *making an effort* like – *studying, reading, running, playing tennis, ballet, chopping down a tree, and cleaning your room*. The participants tried to include – *time passing by* as well.

Here are the examples of all the categories we had:

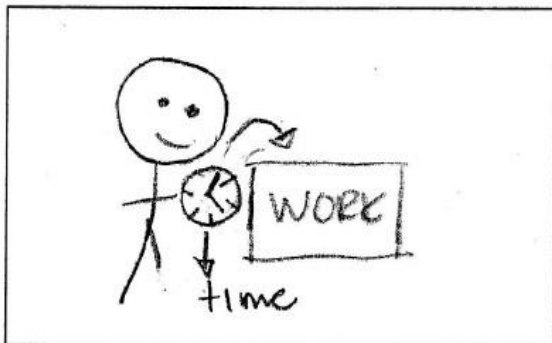
1) TOP



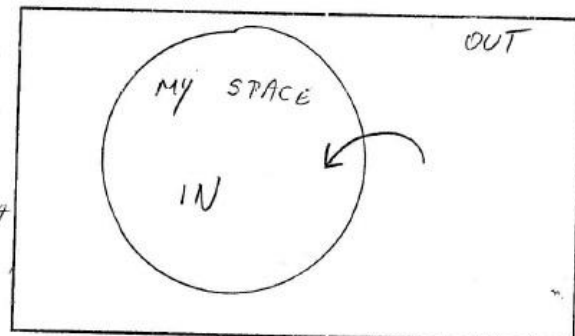
3) PPH



2) CMP



4) MIS



### 2.3.1.1.3.3 *put in* ('elect a political party as the government')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put in* and its meaning 'elect a political party as the government'.

In **the verbal answers**, among **the Croats** there were **9** topological answers, **4** compositional answers, **1** paraphrase and **1** misinterpretation. The Mexicans gave **7** topological answers, **6** compositional answers, **1** paraphrase and **1** misinterpretation.

The most prototypical answers referring to *put in* in this meaning were topological (Cro 9/15 vs. Mex 7/15). Most of the answers included – *put + somebody/party + in + government/the parliament building* or less frequently – *put + your vote + in a box* (Cro 2/9 TOP vs. Mex 4/7 TOP). In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 4/15 vs. Mex 6/15). Only one case included – *put + vote + in a box* (Mex 1/6 CMP). For the verb, they used synonyms like – *place* or *take*. There were not many paraphrases (Cro 1/15 vs. Mex 1/15). Misinterpretations occurred among both groups (Cro 1/15 vs. Mex 1/15).

Here are the examples of all the categories we had:

- 1) TOP – “putting a political party inside the government by election” // “when you vote, you put your ballots inside a box; that’s what I think about”

- 2) CMP – “the act of placing your vote inside a box, or putting the people of the political party in charge of the government”
- 3) LEX - /
- 4) PPH – “it is the action of writing or crossing out ‘x’ party”
- 5) MIS – “introduce something by force”

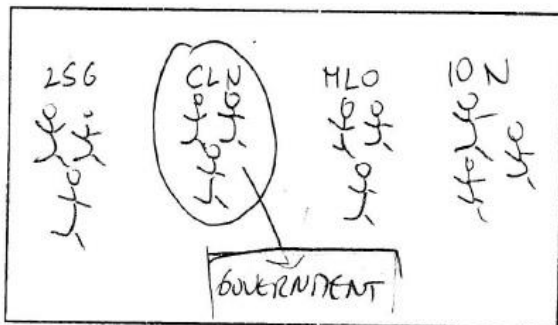
In the pictorial representations, the Croats drew 4 topological drawings, 4 compositional drawings, 5 visual paraphrases and 2 misinterpretations. The Mexicans drew 2 topological drawings, 9 compositional drawings and 4 visual paraphrases.

In the 4/6 topological answers (out of all 30 drawings) there was a party going into the government, and in 2/6 there was a vote-box scenario (Cro 1/4 TOP vs. Mex 1/2 TOP).

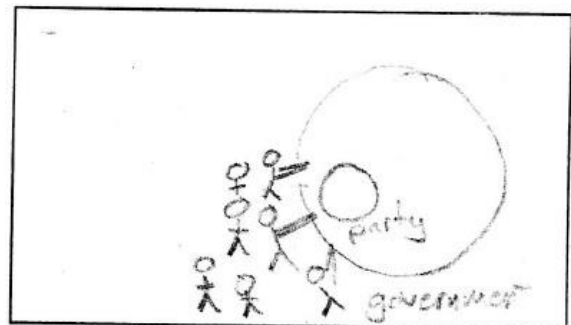
Unlike in the verbal answers, where most were topological, here most of the representations were either compositional (Cro 4/15 vs. Mex 9/15) or visual paraphrases (Cro 5/15 vs. Mex 4/15). Compositionality was usually demonstrated by – a person/people (put) + party + into government or less frequently by – a person + vote-box scenario (Mex 5/9 CMP). In some cases, the verb was written to emphasize the action as well. Visual paraphrases included – election scenarios.

Here are the examples of all the categories we had:

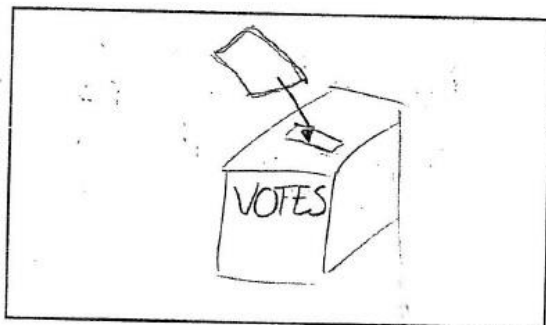
1) TOP 1



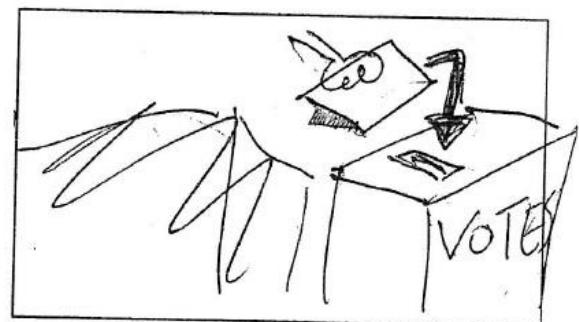
2) CMP 1



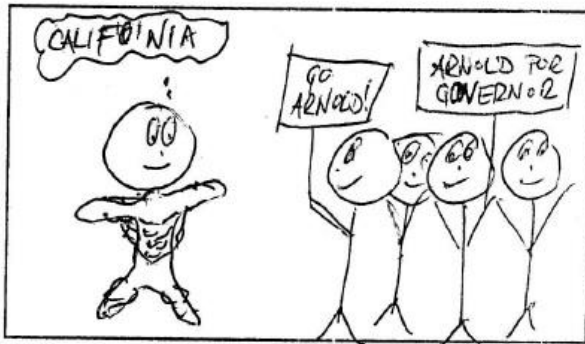
TOP 2



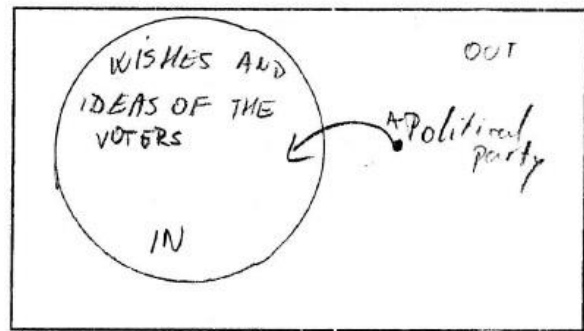
CMP 2



3) PPH



5) MIS



2.3.1.1.3.4 *put in* ('interrupt')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put in* and its meaning 'interrupt'.

In **the verbal answers**, among both **the Croats** and **the Mexicans** there were **9** topological answers, **5** compositional answers and **1** paraphrase.

Most of the answers referring to *put in* were either topological (Cro 9/15 vs. Mex 9/15) or compositional (Cro 5/15 vs. Mex 5/15). The most prototypical topological answer included – *putting something/a strange thing or yourself/comment/opinion + in(side) something/a conversation. The conversation analogy* was most typical for the Mexicans (Cro 3/9 TOP vs. Mex 5/9 TOP). There were two particle verbs before this one in the questionnaire that referred to *interrupting a conversation* – *cut in* and *break in*. The participants used the same strategy to refer to *put in* in this meaning even though there is no context mentioned and they were then able to provide topological answers. We will see the results of *cut in* (see p. 79) and *break in* (see p. 91) later. Only one compositional answer included *the conversation analogy* (Mex 1/5 CMP). For the verb, the most used synonyms were – *place* and *get*.

Here are the examples of all the categories we had:

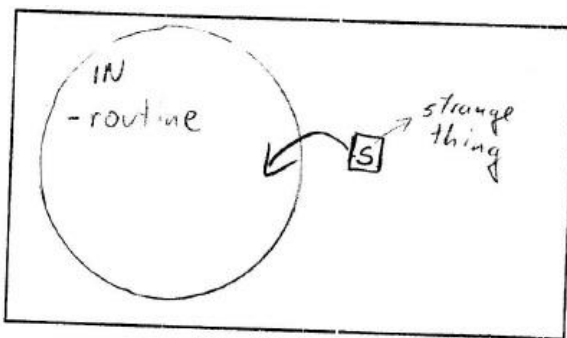
- 1) TOP – “you are putting your opinion into someone’s conversation”
- 2) CMP – “the action of getting yourself ‘in’ – into something that maybe you shouldn’t be a part of”
- 3) LEX – /
- 4) PPH – “if you put in, you say something at the same time as someone else is talking so that they must quiet themselves in order to listen to you”
- 5) MIS – /

In the pictorial representations, the Croats drew 3 topological drawings, 3 compositional drawings, and 9 visual paraphrases. The Mexicans drew 1 topological drawing, 4 compositional drawings and 10 visual paraphrases.

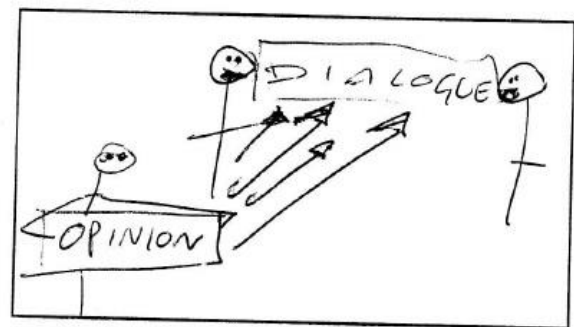
There was more topology among the Croats than the Mexicans (Cro 3/15 vs. Mex 1/15). In the 3/4 topological answers (out of all 30 drawings) there was *something* going into *something* else. 1/4 had a *metonymic door scenario*. Unlike in the verbal answers, where most were topological and compositional, here most of the representations were visual paraphrases (Cro 9/15 vs. Mex 10/15). They mostly included *people scenarios* – someone *interrupting* one or more people. Sometimes that also included a *conversation analogy*. Compositionality (Cro 3/15 vs. Mex 4/15) usually included a topological drawing + *put* written in it or less frequently a *conversation scenario* (Cro 1/3 CMP vs. Mex 1/4 CMP).

Here are the examples of all the categories we had:

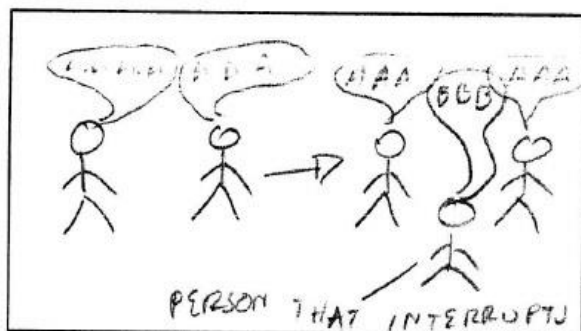
1) TOP



2) CMP



4) PPH



#### 2.3.1.1.3.5 *put out* ('injure your back, shoulder, hip etc.')

There were 30/30 answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'injure your back, shoulder, hip etc.'

In the verbal answers, among the Croats there were 8 topological and 7 compositional answers. The Mexicans gave 7 topological answers, 2 compositional answers, 5 paraphrases and 1 misinterpretation.

There were more answers referring to topology among the Croats (8/15) than among the Mexicans (7/15). The most prototypical answer included – *put + a part of your body + out of its proper place/original position/order*. However, in the rest of the answers, the Croats showed more tendencies towards compositionality (Cro 7/15 vs. Mex 2/15), while the Mexicans showed more tendencies towards paraphrasing the meaning (Mex 5/15). Compositional answers included synonyms for *put* like – *get, make, and push*. It was interesting to see that 1 Croat and 1 Mexican assigned some of the following meanings to the particle *out* – *negative, bad, hurt, can't do anything*.

Here are the examples of all the categories we had:

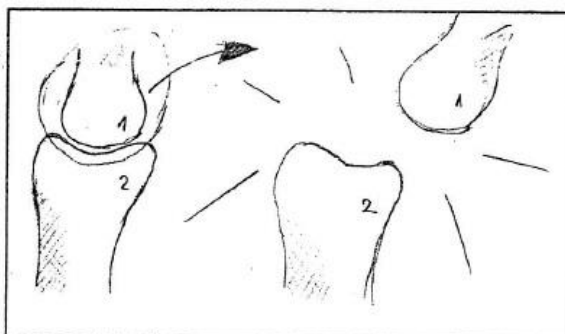
- 1) TOP – “every bone has its place, when you injure them you put them out of their place”
- 2) CMP – “‘out’ in a negative way, out of place, it’s something bad, ‘put’ to place something somewhere or to displace”
- 3) LEX – /
- 4) PPH – “when you suffer an accident and a part of your body gets hurt”
- 5) MIS – “either to locate your attention to something that stands out or separate (discriminate) one part of your body because of an injury”

In **the pictorial representations, the Croats** drew **3** topological drawings, **2** compositional drawings, and **10** visual paraphrases. The Mexicans drew **2** topological drawings, **0** compositional drawings, **12** visual paraphrases and **1** misinterpretation.

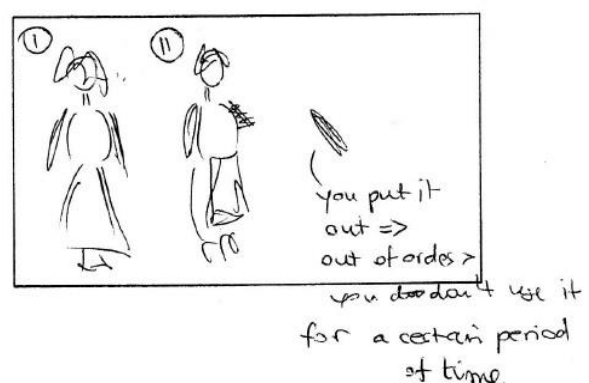
In all 5 topological drawings (Cro 3/15 vs. Mex 2/15) there was *a body part (hand, arm, bone) going out of its place*. Unlike in the verbal answers, where only the Mexicans paraphrased the meaning, here most of the representations of both groups were visual paraphrases (Cro 10/15 vs. Mex 12/15). They showed *an injury of some part of the body*.

Here are the examples of all the categories we had:

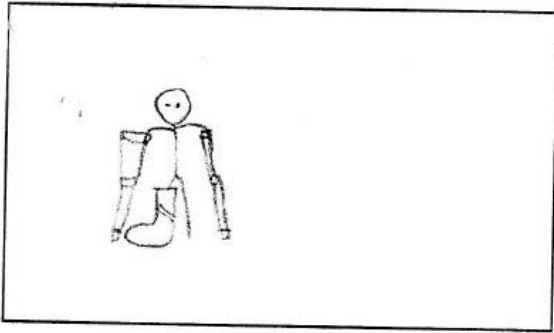
1) TOP



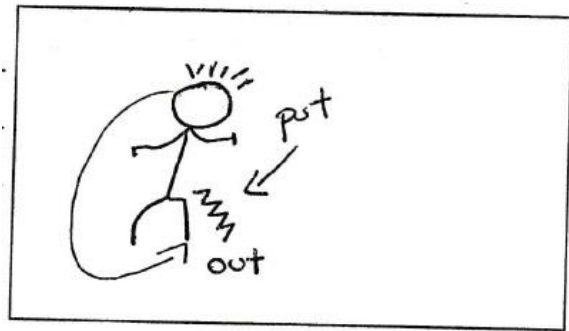
2) CMP



4) PPH



5) MIS



2.3.1.1.3.6 *put out* ('extinguish, stop from burning')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'extinguish, stop from burning'.

In the **verbal answers**, among the **Croats** there were **4** topological answers, **7** compositional answers, **2** paraphrases, and **2** misinterpretations. **The Mexicans** gave **4** topological answers, **4** compositional answers, **1** lexical answer and **6** paraphrases.

There were 8 topological answers about *put out* in this meaning (Cro 4/15 vs. Mex 4/15). The most prototypical answer included *put something + out/out of order/out of something*. However, in the rest of the answers, the Croats showed more tendencies towards compositionality (Cro 7/15), while the Mexicans showed more tendencies towards compositionality (Mex 4/15) and paraphrasing the meaning (Cro 2/15 vs. Mex 6/15). Compositional answers included synonyms for *put* like – *place* and *force*. It was interesting to see that primarily the Croats (Cro 5/15) assigned the following meanings to the particle *out* – *negative but positive, absent, invisible, stop, stop existing, and disappear*. It was most noticeable in their compositional answers.

Here are the examples of all the categories we had:

- 1) TOP – “you put it out of its current state – currently it is burning and you put it out of that state”
- 2) CMP – “the fire is forced out of its function”
- 3) LEX – “closely related to ‘go out’, the difference relies upon the fact that the verb ‘put’ implies the action of something or somebody over the fire”
- 4) PPH – “usually when someone extinguishes a fire he must get something out of his equipment and extinguish the fire”
- 5) MIS – “you remove the burning force from the fire, you put its force and sparks out of the fire”

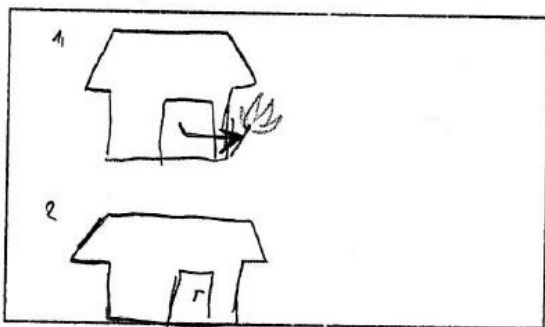
In the pictorial representations, the Croats drew 1 topological drawing, 3 compositional drawings, 9 visual paraphrases and 2 misinterpretations. The Mexicans drew 1 topological drawing, 4 compositional drawings, and 10 visual paraphrases.

The 2 topological drawings (Cro 1/15 vs. Mex 1/15) we had were different. In one *the fire went out of a house* and in the second one *the fire was leaving the thing that was burning*.

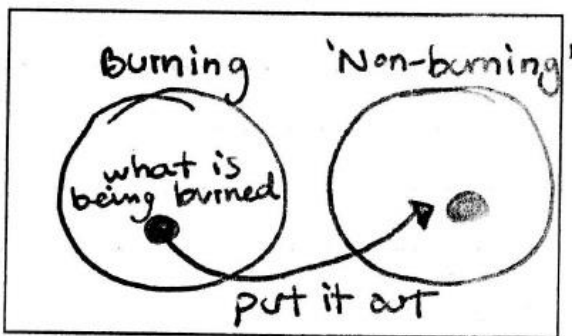
Compositionality (Cro 3/15 vs. Mex 4/15) usually included a *people scenario* in which fire was *put out of the house* or *forced out of the thing that was burning*. In three cases *put* and *out* were shown separately – *put* as an action and *out* as disappear and ‘stop burning’. Unlike in the verbal answers, here most of the answers were primarily visual paraphrases of ‘extinguish’ (Cro 9/15 vs. Mex 10/15). Misinterpretations occurred only among the Croats and they included *reverse viewing* (Cro 2/15 vs. Mex 0/15).

Here are the examples of all the categories we had:

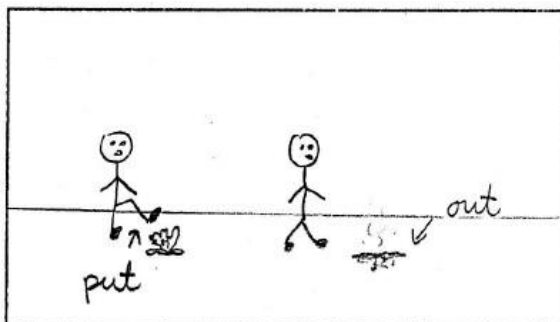
1) TOP



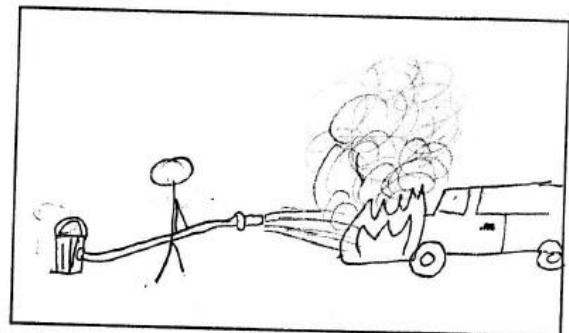
2) CMP



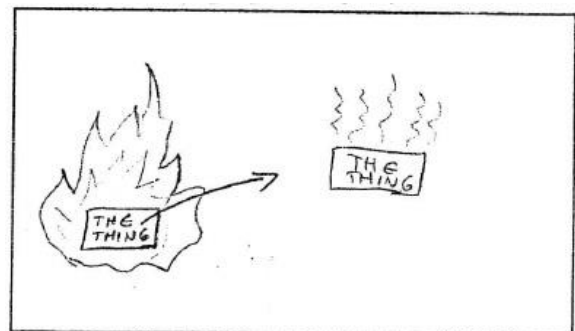
CMP 2



4) PPH



5) MIS





### 2.3.1.1.3.7 *put out* ('make a figure or a result wrong')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'make a figure or a result wrong'.

In **the verbal answers**, among **the Croats** there were **3** topological answers, **9** compositional answers, **1** paraphrase and **2** misinterpretations. The Mexicans gave **4** topological answers, **4** compositional answers, **6** paraphrases and **1** misinterpretation.

There were more answers referring to topology among the Mexicans (Mex 4/15) than among the Croats (Cro 3/15). The most prototypical answer included – *put + a figure/result/ something + out of accuracy/order/what is right*. In the rest of the answers, the Croats showed more tendencies towards compositionality (Cro 9/15), while the Mexicans showed more tendencies towards compositionality (Mex 4/15) and paraphrasing the meaning (Cro 1/15 vs. Mex 6/15). Compositional answers included synonyms of *put* like – *place, push, and take*. It was interesting to see that 4 Croats assigned the following meanings to the particle *out*: *negative, wrong, visible, or obvious*.

Here are the examples of all the categories we had:

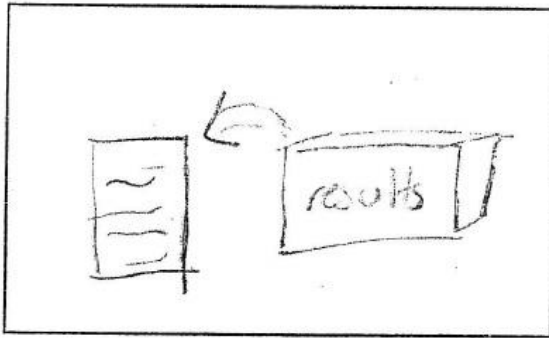
- 1) TOP – “putting a result out of place or out of the right calculations”
- 2) CMP – “‘put’ – adding up the figures quickly (that’s why they’re wrong) → put them together; ‘out’ – wrong, outside of the range of results it should be in”
- 3) LEX – /
- 4) PPH – “to achieve something but the result is wrong”
- 5) MIS – “to show everybody a figure or a result that is wrong, to put it out, so everybody can see it”

In **the pictorial representations**, the Croats drew **2** topological, **4** compositional drawings, **6** visual paraphrases, and **3** misinterpretations. **The Mexicans** drew **2** topological drawings, **1** compositional drawing, **9** visual paraphrases and **3** misinterpretations.

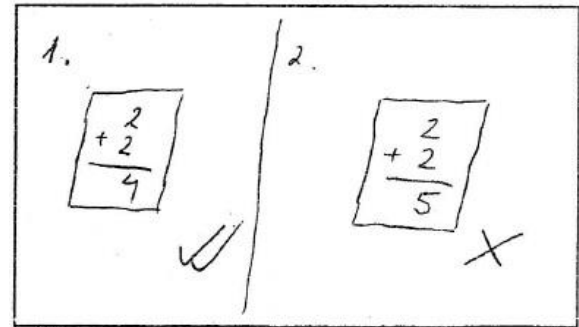
The most prototypical topological drawing (Cro 2/15 vs. Mex 2/15) included *something going out of a container*. Compositional drawings (Cro 4/15 vs. Mex 1/15) usually included a topological representation and a written – *put*. Unlike in the verbal answers, where mostly the Mexicans paraphrased the meaning, here most drawings of *put out* of both groups were visual paraphrases (Cro 6/15 vs. Mex 9/15). They usually included *Math exercises*.

Here are the examples of all the categories we had:

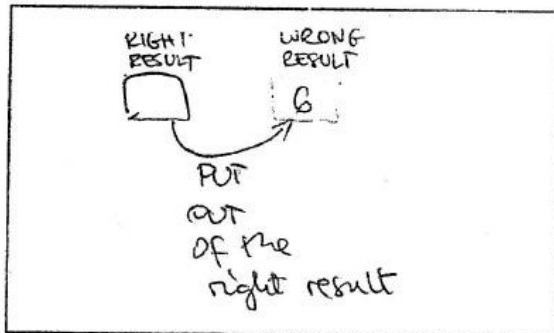
1) TOP



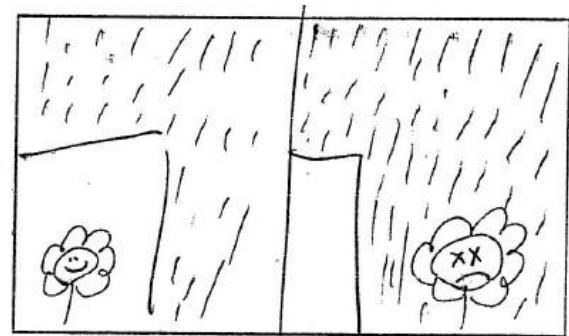
4) PPH



2) CMP



5) MIS



### 2.3.1.1.3.8 *put out* ('make somebody go to sleep or unconscious')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'make somebody go to sleep or unconscious'.

In **the verbal answers**, among **the Croats** there were **7** topological and **6** compositional answers, and **2** paraphrases. **The Mexicans** gave **6** topological and **7** compositional, and **2** paraphrases.

There were more answers referring to topology among the Croats (7/15) than among the Mexicans (6/15). The most prototypical answer included – *put + somebody + out of consciousness* (Cro 6/7 TOP vs. Mex 2/6 TOP) or less frequently *reverse viewing – put + somebody's consciousness/energy/awareness + out of somebody* (Cro 1/7 TOP vs. Mex 4/6 TOP). In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 6/15 vs. Mex 7/15). Those answers included – *put* (explained separately or by its synonym) + *somebody* and *out of conscience*. Compositional answers included synonyms for *put* such as – *place, take, force, knock, punch, and bring*. It was interesting to see that 3 Croats and 1 Mexican assigned the following meanings to the particle *out* – *unaware, unconscious* or *absence*. There were few paraphrases (Cro 2/15 vs. Mex 2/15).

Here are the examples of all the categories we had:

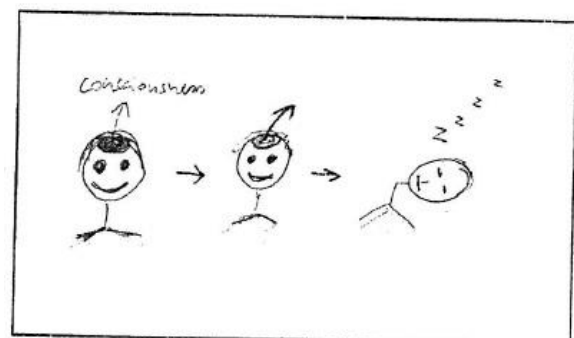
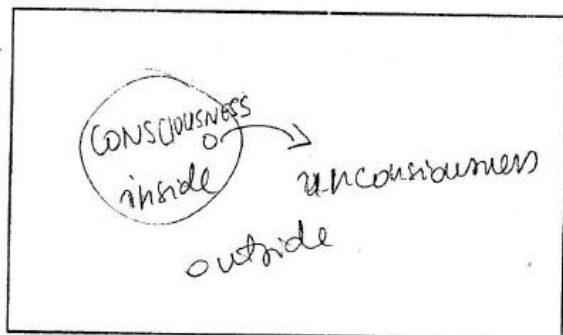
- 1) TOP – “put somebody out of his usual state of consciousness” // “you put the state of awareness or of being awake out of the owner, so once it is out of him, he goes to sleep”
- 2) CMP – “‘out’ – sleeping, unconscious, outside of the world around you, not realizing it; ‘put’ – the process of punching somebody quickly and hard”
- 3) LEX – /
- 4) PPH – “if you put out somebody you either make them tired or you hypnotise them”
- 5) MIS – /

In the pictorial representations, the Croats drew 3 topological drawings, 5 compositional drawings, and 7 visual paraphrases. The Mexicans drew 1 topological drawing, 5 compositional drawings and 9 visual paraphrases.

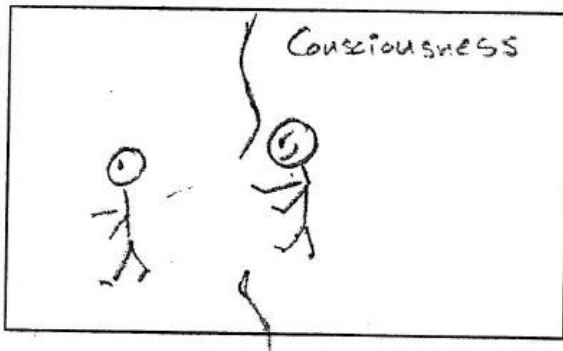
In 2/4 topological drawings (Cro 3/15 vs. Mex 1/15) there was a *person going out of the sphere of consciousness*. One topological drawing did not include a *person* in it, but just *something going out of the sphere of consciousness*. Another drawing (Cro 1/4 TOP) included *reverse viewing – consciousnesses going out of a person’s head*. Compositional drawings (Cro 5/5 CMP vs. Mex 3/5 CMP) included – *a person putting another person out of consciousness* or less frequently (Mex 2/5 CMP) *a person putting awareness out of a person*. Unlike in the verbal answers, where both groups showed more tendencies towards topology and compositionality, here most of the representations were visual paraphrases (Cro 7/15 vs. Mex 9/15). They included different *people scenarios* or just *an unconscious person*.

Here are the examples of all the categories we had:

- 1) TOP 1 & TOP – R

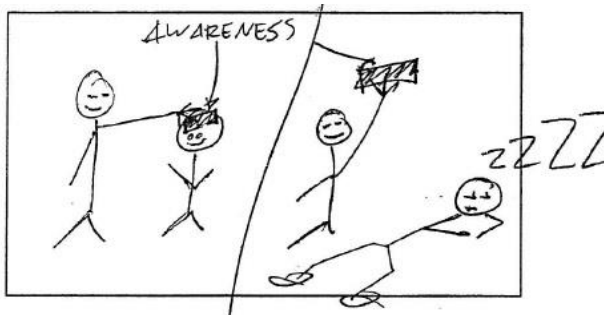
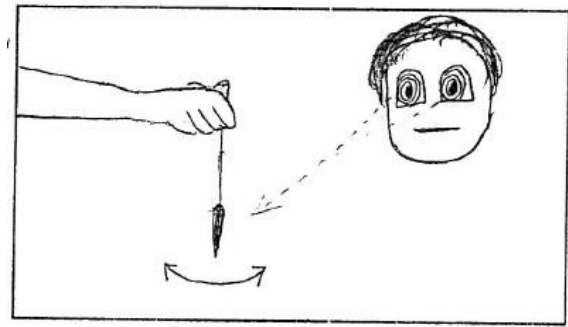


2) CMP



CMP – R

4) PPH



2.3.1.1.3.9 *put out* ('broadcast, publish or issue')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'broadcast, publish or issue'.

In **the verbal answers**, both **the Croats** and **the Mexicans** presented **7** topological answers, **6** compositional answers, and **2** paraphrases.

There were 14 answers referring to topology (Cro 7/15 vs. Mex 7/15). The most prototypical answer included – *put + something/information + out + for everyone to see*. In the rest of the answers both groups showed more tendencies towards compositionality (Cro 6/15 vs. Mex 6/15). Those answers included synonyms like – *place, take* and *deliver*. It was interesting to see that primarily the Croats (4/15) assigned the following meanings to the particle *out* – *known, public, visible, and available*. It was most noticeable in their compositional answers. There were paraphrases among both groups (Cro 2/15 vs. Mex 2/15).

Here are the examples of all the categories we had:

- 1) TOP – “to put something out there, where everyone can see it and find out about it”
- 2) CMP – “‘put’ action of bringing ‘out’ to the public of something; ‘out’ – make something known, public”
- 3) LEX – /

4) PPH – “make some information available to everyone”

5) MIS – /

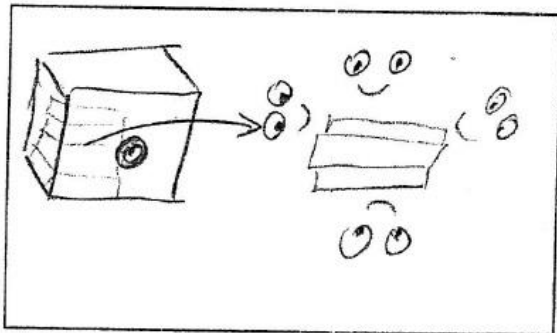
In the pictorial representations, the Croats drew 5 topological drawings, 4 compositional drawings, and 6 visual paraphrases. The Mexicans drew 0 topological drawings, 2 compositional drawings, 1 lexical drawing and 12 visual paraphrases.

Only the Croats drew topology. The most prototypical topological drawing (Cro 5/15 vs. Mex 0/15) included *something going out of a container into the outside world* (3/5). In 2/5 cases, *information was put out of the radio/antenna*.

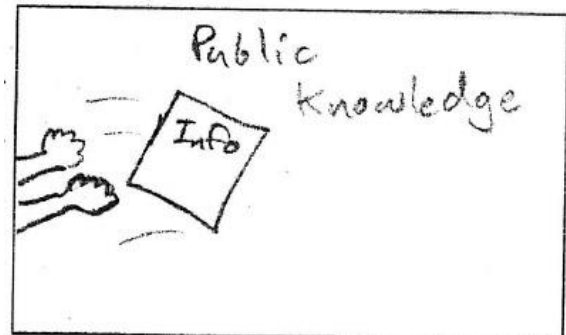
Compositional drawings (Cro 4/15 vs. Mex 2/15) included *a person putting a newspaper out somewhere*. Some had a written *put* in the drawing. The rest of the drawings were primarily visual paraphrases of ‘broadcast, publish or issue’ (Cro 6/15 vs. Mex 12/15). The one lexical drawing was vague but what was clear was the verb *put* (Mex 1/15).

Here are the examples of all the categories we had:

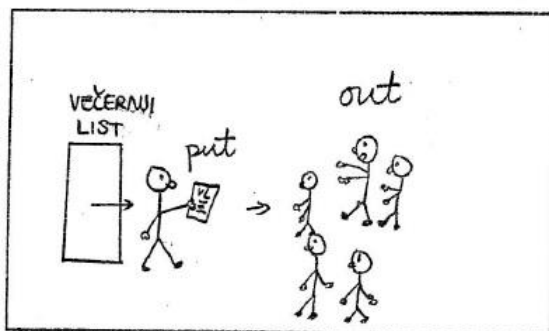
1) TOP



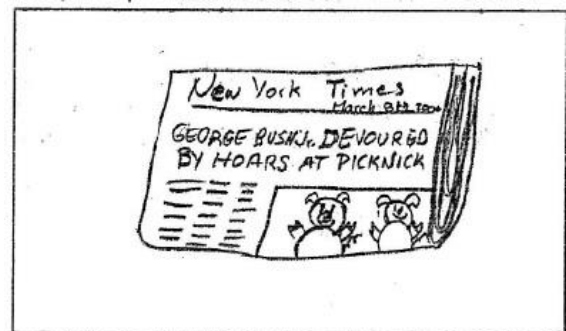
3) LEX



2) CMP



4) PPH



### 2.3.1.1.3.10 *put out* ('switch something off')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'switch something off'.

In **the verbal answers**, among **the Croats** there were **8** topological answers, **5** compositional answers and **2** paraphrases. **The Mexicans** gave **6** topological answers, **5** compositional answers and **4** paraphrases.

There were more topological answers among the Croats (8/15) than among the Mexicans (6/15). The most prototypical answer included – *put + something + out of function/working/service/place/electricity/order* or less frequently – *put + energy + out of something* (Cro 2/8 TOP vs. Mex 2/6 TOP). In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 5/15 vs. Mex 5/15). Compositional answers included – *put/take/place something* and *out of function*, etc. Only one answer included *reverse viewing* (Mex 1/3 CMP). It was interesting to see that 4 Croats and 1 Mexican assigned the following meanings to the particle *out* – *negative, off, gone, done, finished, stop functioning, not working anymore, no longer acceptable, functional, or operational*. Both groups showed tendencies towards paraphrasing the meaning (Cro 2/15 vs. Mex 4/15).

Here are the examples of all the categories we had:

- 1) TOP – “you put something out of service” // “put the energy out of something so as to turn it off”
- 2) CMP – “if we ‘put’ (action) the light ‘out’ (something negative), we sort of kill it, make it disappear, gone (‘out’ of something)” // “something has energy on it, so you take it and out it outside the object, which cannot support itself without energy”
- 3) LEX – /
- 4) PPH – “when you put out a fire, you extinguish it and there isn’t light anymore; in the same way when there isn’t electricity, a light bulb doesn’t produce light”
- 5) MIS – /

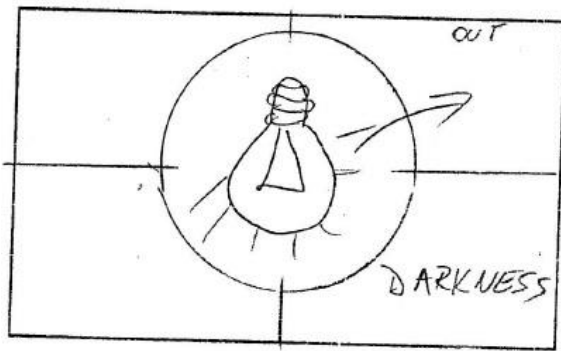
**In the pictorial representations**, **the Croats** drew **5** topological drawings, **3** compositional drawings, and **7** visual paraphrases. **The Mexicans** drew **4** topological drawings, **3** compositional drawings, and **8** visual paraphrases.

Topological drawings (Cro 5/15 vs. Mex 4/15) included *a light going out of a sphere*. In 2/9 TOP drawings, there was *an arrow going out of on into the off sphere*. In 3/9 TOP drawings, *something (energy)* was *going out of something* (Cro 2/5 TOP vs. Mex 1/4 TOP).

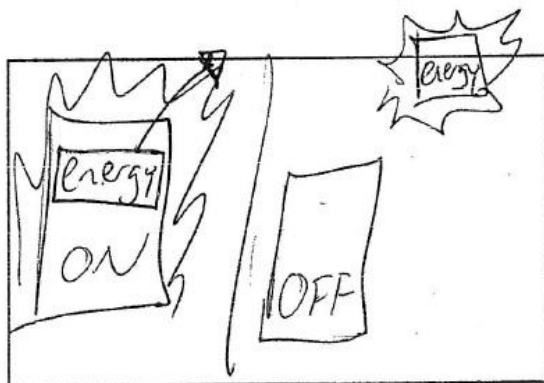
Compositional drawings (Cro 3/15 vs. Mex 3/15) included – a person putting something out of the sphere of action; a person putting light out of the on position; a process of switching off the light + the light leaving out of the window; and, reverse viewing – a person switching off the light and the energy leaving the light; and a person pushing energy out of a toaster (Mex 2/3 CMP). Unlike in the verbal answers, where both groups showed more tendencies towards topology and compositionality, here both groups showed more tendencies towards visual paraphrases (Cro 7/15 vs. Mex 8/15). They included *switching off the light* or just simply *a light switch*.

Here are the examples of all the categories we had:

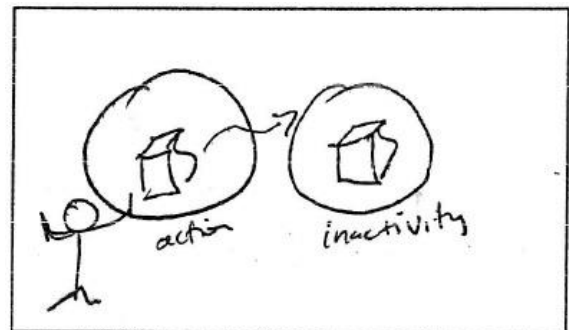
1) TOP



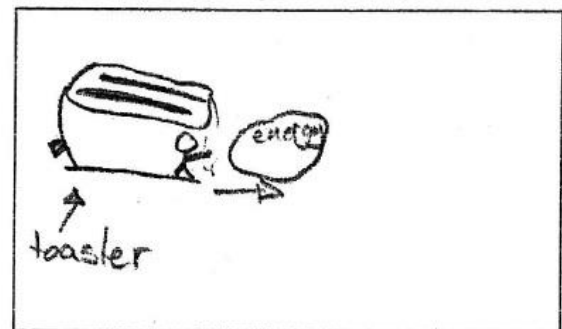
TOP – R



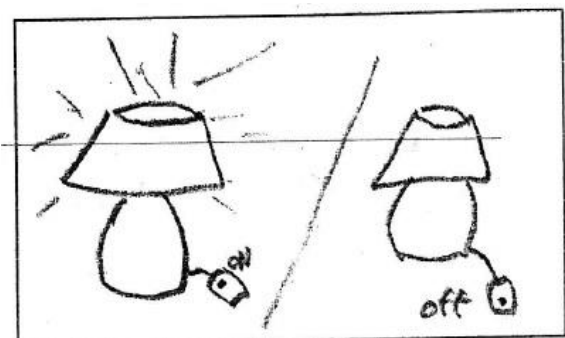
2) CMP



CMP – R



4) PPH



### 2.3.1.1.3.11 *put out* ('make trouble, problems, extra work')

There were **29/30** answers in both verbal and pictorial representations of the particle verb *put out* and its meaning 'make trouble, problems, extra work'.

In **the verbal answers**, among **the Croats** there were **7** topological and **6** compositional answers, **1** paraphrase and **1** misinterpretation. **The Mexicans** gave **7** topological answers, **2** compositional, **3** paraphrases, **2** misinterpretations and **1** no text.

There were 14 topological answers about *put out* in this meaning (Cro 7/15 vs. Mex 7/14). The most prototypical answer included – *put + problems + out in the open/out of yourself/out of your sphere/out of a drawer with problems* (Cro 4/7 vs. Mex 3/7) or – *put + someone/something + out where the problems are/out of order* (Cro 3/7 vs. Mex 4/7). However, in the rest of the answers the Croats showed more tendencies towards compositionality (Cro 6/15), while the Mexicans showed more tendencies towards compositionality (Mex 2/14) and paraphrasing the meaning (Cro 1/15 vs. Mex 3/14). Compositional answers also included – *putting something out of yourself* or *putting someone/something out of order*. For *put*, they used synonyms like: *place* and *take*. It was interesting to see that 2 Croats assigned the following meanings to the particle *out*: *visible*, *unsafe*, and *obvious*.

Here are the examples of all the categories we had:

- 1) TOP – “you put out the undesirable things like troubles, problems, extra work; you create it, you put it out in the world from yourself”
- 2) CMP – “‘put’ meaning place something somewhere, in this case to place it wrong so as to cause trouble, ‘out’ meaning in the open, visible to everyone”
- 3) LEX – /
- 4) PPH – “if you put out, you do something that annoys other people”
- 5) MIS – “you put a large amount of work in front of you; out – all this work (studying, knowledge) is out of your head and it should be put inside”

In **the pictorial representations**, **the Croats** drew **4** topological, **4** compositional drawings and **7** visual paraphrases. **The Mexicans** drew **2** topological drawings, **3** compositional drawings, **7** visual paraphrases, **2** misinterpretations and **1** no picture.

There was more topology among the Croats (Cro 4/15 vs. Mex 2/14). In 4/6 topological drawings (out of all 29), there was *something going out of a (order) sphere*. In 1/6 case *disorder* was going *out of a container*, and in 1/6 there was *energy going out of a person's body*. Compositional drawings (Cro 4/15 vs. Mex 3/14) usually included *a person putting problems out of themselves* or *a person putting problems out of their sphere/out of a*



*window/drawer*. Unlike in the verbal answers, here both groups showed more tendencies towards visual paraphrases (Cro 7/15 vs. Mex 7/14). They included – ‘trouble, problems, or extra work’. Misinterpretations (Mex 2/14) included *problems going into something*.

Here are the examples of all the categories we had:

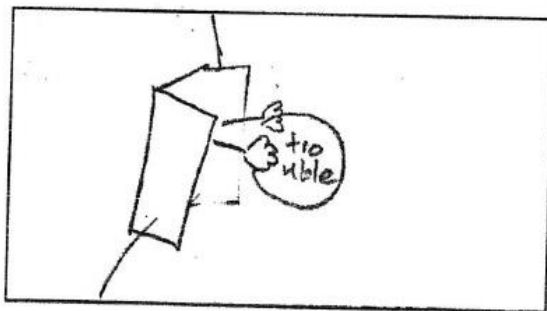
1) TOP



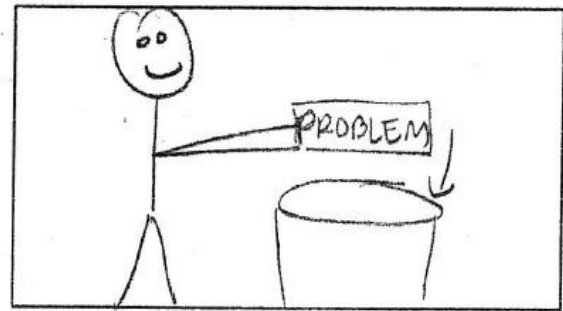
4) PPH



2) CMP



5) MIS



### 2.3.1.1.3.12 Discussion and Conclusions: *put in* and *put out*

In conclusion, most of the verbal answers for *put in* and all its meanings (‘officially make a claim for something’; ‘spend time or effort doing something’; ‘elect a political party as the government’; ‘interrupt’) included a lot of topology and compositionality among both groups (Table 9). If we compare the results for topology, we can see that the number of topological answers in both groups increases after each encounter with this PV. Compositionality, in turn, varied slightly among both groups. It is also important to mention that with certain meanings the Mexicans showed tendencies towards the use of *vote-box* and *conversation* scenarios more than the Croats. Lexical determination occurred only once among the Mexicans and with the second meaning of *put in*. Paraphrases occurred more among the Mexicans and misinterpretations occurred in the first three meanings of *put in*.

Table 9. Results of the verbal answers for the PV *put in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and <i>IN</i>	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>PUT IN</b> (‘officially make a claim for something’)	5	8	-	1	1	-	2	6	-	4	3	-
<b>PUT IN</b> (‘spend time or effort doing something’)	6	8	-	-	1	-	6	6	1	2	-	-
<b>PUT IN</b> (‘elect a political party as the government’)	9	4	-	1	1	-	7	6	-	1	1	-
<b>PUT IN</b> (‘interrupt’)	9	5	-	1	-	-	9	5	-	1	-	-

In the verbal answers for *put out* and all its meanings (‘injure your back, shoulder, hip etc.’; ‘extinguish, stop from burning’; ‘make a figure or a result wrong’; ‘make somebody go to sleep or unconscious’; ‘broadcast, publish or issue’; ‘switch something off’; ‘make trouble, problems, extra work’), both groups showed equal tendencies towards topology (Table 10). However, with some meanings of *put out* (‘injure your back, shoulder, hip etc.’; ‘extinguish, stop from burning’; ‘make a figure or a result wrong’; ‘make trouble, problems, extra work’) the Croats showed more tendencies towards compositionality than the Mexicans. In the rest of the meanings of *put out* (‘make somebody go to sleep or unconscious’; ‘broadcast, publish or issue’; ‘switch something off’), both groups showed equal tendencies towards compositionality. Both groups also showed tendencies towards *reverse viewing* with some meanings of *put out* (‘make somebody go to sleep or unconscious’; ‘switch something off’), however, it did occur more among the Mexicans. Lexical determination occurred only once among the Mexicans and with *put out* (‘extinguish, stop from burning’). Paraphrases occurred significantly more among the Mexicans. Misinterpretations occurred equally among both groups. Some participants assigned the following meanings to the particle *out* – *absence*; *available*; *bad*, *can’t do anything*; *disappear*; *done*, *finished*, *gone*, *hurt*, *invisible*, *known*, *negative but positive*, *negative*, *no longer acceptable*, *functional*, or *operational*; *not working anymore*, *obvious*, *obvious*; *off*, *public*, *stop*; *stop existing*, *unaware*, *unconscious*, *unsafe*, *visible*, or *wrong*. It occurred primarily among the Croats.

Table 10. Results of the verbal answers for the PV put out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>PUT OUT</b> (‘injure your back, shoulder, hip etc.’)	8	7	-	-	-	-	7	2	-	5	1	-
<b>PUT OUT</b> (‘extinguish, stop from burning’)	4	7	-	2	2	-	4	4	1	6	-	-
<b>PUT OUT</b> (‘make a figure or a result wrong’)	3	9	-	1	2	-	4	4	-	6	1	-
<b>PUT OUT</b> (‘make somebody go to sleep or unconscious’)	7	6	-	2	-	-	6	7	-	2	-	-
<b>PUT OUT</b> (‘broadcast, publish or issue’)	7	6	-	2	-	-	7	6	-	2	-	-
<b>PUT OUT</b> (‘switch something off’)	8	5	-	2	-	-	6	5	-	4	-	-
<b>PUT OUT</b> (‘make trouble, problems, extra work’)	7	6	-	1	1	-	7	2	-	3	2	1

However, in the drawings of *put in* and all its meanings, the differences among the Croats and the Mexicans are more prominent (Table 11). The Croats generally show tendencies towards both topology and compositionality. The Mexicans, in turn, show less tendencies towards topology and more towards compositionality. It is also important to mention that the Mexicans showed more tendencies towards the use of *vote-box scenarios* than the Croats, just like in the verbal answers. Lexical determination occurred among both groups only with *put in* (‘officially make a claim for something’). Visual paraphrases occurred among both groups. Misinterpretations occurred with the first three meanings of *put in* and varied.

Table 11. Results of the pictorial representations of the PV *put in*

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and <i>IN</i>	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>PUT IN</b> (‘officially make a claim for something’)	3	6	1	5	-	-	2	5	2	2	4	-
<b>PUT IN</b> (‘spend time or effort doing something’)	3	5	-	6	1	-	-	9	-	6	-	-
<b>PUT IN</b> (‘elect a political party as the government’)	4	4	-	5	2	-	2	9	-	4	-	-
<b>PUT IN</b> (‘interrupt’)	3	3	-	9	-	-	1	4	-	10	-	-

In the drawings of *put out* and all its meanings, the differences among the Croats and the Mexicans are more prominent (Table 12). In the first three meanings of *put out* (‘injure your back, shoulder, hip etc.’; ‘extinguish, stop from burning’; ‘make a figure or a result wrong’), topology occurs equally among both groups. In the last four meanings of *put out* (‘make somebody go to sleep or unconscious’; ‘broadcast, publish or issue’; ‘switch something off’; ‘make trouble, problems, extra work’), there are more topological drawings among the Croats than among the Mexicans. When it comes to compositionality, the results vary. With three meanings of *put out* (‘injure your back, shoulder, hip etc.’; ‘make a figure or a result wrong’; ‘broadcast, publish or issue’), there are slightly more compositional drawings among the Croats. In the rest of the meaning of *put out* (‘extinguish, stop from burning’; ‘make somebody go to sleep or unconscious’; ‘switch something off’; ‘make trouble, problems, extra work’), both groups show equal tendencies towards compositionality. Both groups also showed tendencies towards *reverse viewing* with some meanings of *put out* (‘make somebody go to sleep or unconscious’; ‘switch something off’), however, it did occur more among the Mexicans. Lexical determination occurred only once among the Mexicans with *put out* (‘broadcast, publish or issue’). There were more visual paraphrases than in the verbal answers and they again occurred more among the Mexicans. Misinterpretations also occurred more among the Mexicans.

Table 12. Results of the pictorial representations of the PV put out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>PUT OUT</b> (‘injure your back, shoulder, hip etc.’)	3	2	-	10	-	-	2	-	-	12	1	-
<b>PUT OUT</b> (‘extinguish, stop from burning’)	1	3	-	9	2	-	1	4	-	10	-	-
<b>PUT OUT</b> (‘make a figure or a result wrong’)	2	4	-	6	3	-	2	1	-	9	3	-
<b>PUT OUT</b> (‘make somebody go to sleep or unconscious’)	3	5	-	7	-	-	1	5	-	9	-	-
<b>PUT OUT</b> (‘broadcast, publish or issue’)	5	4	-	6	-	-	-	2	1	12	-	-
<b>PUT OUT</b> (‘switch something off’)	5	3	-	7	-	-	4	3	-	8	-	-
<b>PUT OUT</b> (‘make trouble, problems, extra work’)	4	4	-	7	-	-	2	3	-	7	2	1

#### 2.3.1.1.4 Discussion and Conclusions: PVs containing light verbs

In the verbal answers for the PVs containing light verbs *go*, *take*, and *put* and the particle *in* it is visible that most of the answers of both groups are topological and compositional. Compositionality occurred more than topology. Lexical determination occurred rarely and only among the Mexicans. There were paraphrases among both groups, and misinterpretations occurred twice as much among the Mexicans (Table 13). *Reverse viewing* occurred with some meanings of *go in* and *take in* and more among the Mexicans. It was interesting to see that both groups showed tendencies towards the use of *vote-box scenarios*, but it occurred significantly more among the Mexicans.

Table 13. Results of the verbal answers for the PVs with light verbs + IN

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
GO IN (2)	11	14	-	5	-	-	8	14	-	5	3	-
TAKE IN (3)	11	25	-	7	2	-	8	23	1	7	5	1
PUT IN (4)	29	25	-	3	3	-	24	23	1	8	4	-
RESULTS	<b>51</b>	<b>64</b>	<b>-</b>	<b>15</b>	<b>5</b>	<b>-</b>	<b>40</b>	<b>60</b>	<b>2</b>	<b>20</b>	<b>12</b>	<b>(1)</b>
	<b>135</b>						<b>134</b>					
	<b>269</b>											

In the verbal answers for the PVs containing light verbs *go*, *take*, and *put* and the particle *out* it is visible that topology occurred equally among both groups. However, compositionality occurred significantly more among the Croats. Lexical determination occurred rarely and only among the Mexicans. Paraphrases occurred among both groups but significantly more among the Mexicans. Misinterpretations occurred equally among both groups (Table 14). Both groups showed tendencies towards *reverse viewing* with some meanings of *take out* and *put out*. However, it did occur interchangeably slightly more among one group than the other. In some cases, the participants assigned the following meanings to the particle *out* – *absence; available; bad, can't do anything; dead, disappear; done, end, exclude, finished, gone, hurt, invisible, known, negative but positive, negative, functional, or operational; not working anymore, obvious, obvious; off, public, stop; stop existing, unacceptable, unaware, unconscious, unfashionable, unsafe, visible, or wrong*. This occurred almost only among the Croats.

Table 14. Results of the verbal answers for the PVs with light verbs + OUT

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
GO OUT (2)	9	12	-	7	2	-	8	9	1	11	1	-
TAKE OUT (2)	12	16	-	2	-	-	10	10	-	8	2	-
PUT OUT (7)	44	46	-	10	5	-	41	30	1	28	4	1
RESULTS	<b>65</b>	<b>74</b>	<b>-</b>	<b>19</b>	<b>7</b>	<b>-</b>	<b>59</b>	<b>49</b>	<b>2</b>	<b>47</b>	<b>7</b>	<b>(1)</b>
	<b>165</b>						<b>164</b>					
	<b>329</b>											

In the pictorial representations of the PVs containing light verbs *go*, *take*, and *put* and the particle *in* it is visible that there was more topology among the Croats than the Mexicans. Compositionality occurred equally among both groups. Lexical determination was almost non-existent among both groups. There were many visual paraphrases among both groups. Misinterpretations occurred three times as much among the Mexicans (Table 15). Just like in the verbal answers, both groups showed tendencies towards *vote-box scenarios* with some meanings of *put in* but it did occur more among the Mexicans.

Table 15. Results of the pictorial representations of the PVs with light verbs + IN

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
GO IN (2)	3	15	-	12	-	-	1	13	-	13	3	-
TAKE IN (3)	19	10	-	15	1	-	8	8	-	23	5	1
PUT IN (4)	13	18	1	25	3	-	5	27	2	22	4	-
RESULTS	<b>35</b>	<b>43</b>	<b>1</b>	<b>52</b>	<b>4</b>	<b>-</b>	<b>14</b>	<b>48</b>	<b>2</b>	<b>58</b>	<b>12</b>	<b>(1)</b>
	<b>135</b>						<b>134</b>					
	<b>269</b>											

In the pictorial representations of the PVs containing light verbs *go*, *take*, and *put* and the particle *out* it is visible that there was more topology and compositionality among the Croats. Lexical determination occurred rarely and only among the Mexicans. There were many visual paraphrases among both groups, especially among the Mexicans. Misinterpretations occurred equally among both groups (Table 16). Both groups showed tendencies towards *reverse viewing* with some meanings of *take out* and *put out*. However, it did occur interchangeably slightly more among one group than the other.

Table 16. Results of the pictorial representations of the PVs with light verbs + OUT

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with LIGHT VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
GO OUT (2)	-	14	-	14	2	-	2	7	2	19	-	-
TAKE OUT (2)	5	12	-	13	-	-	3	10	2	13	2	-
PUT OUT (7)	23	25	-	52	5	-	12	18	1	67	6	1
RESULTS	<b>28</b>	<b>51</b>	<b>-</b>	<b>79</b>	<b>7</b>	<b>-</b>	<b>17</b>	<b>35</b>	<b>5</b>	<b>99</b>	<b>8</b>	<b>(1)</b>
	<b>165</b>						<b>164</b>					
	<b>329</b>											

In conclusion, most of the verbal answers for the PVs containing light verbs *go*, *take*, and *put* and the particles *in* and *out* of both groups included topology and compositionality. In the answers for the PVs containing the particle *in*, both groups showed equal tendencies towards both categories. In the answers for the PVs containing the particle *out*, both groups showed equal tendencies towards topology. However, compositionality occurred more among the Croats, while the Mexicans showed more tendencies towards paraphrasing the meaning. Lexical determination occurred rarely and only among the Mexicans. Misinterpretations occurred among both groups but more so among the Mexicans and the particle *in*. *Reverse viewing* occurred with some meanings, sometimes more among the Croats and sometimes more among the Mexicans. Primarily the Croats assigned different meanings to the particle *out*.

However, in the pictorial representations there was less topology and compositionality than in the verbal answers. Topology occurred more among the Croats than the Mexicans with both *in* and *out*. Compositionality occurred equally among both groups and the particle *in*, but with the particle *out* it occurred more among the Croats. Lexical determination occurred rarely but more so among the Mexicans. Unlike in the verbal answers, here most of the drawings of both groups were visual paraphrases. They occurred equally with the particle *in*, but with the particle *out* they occurred more among the Mexicans. Misinterpretations occurred among both groups but more so among the Mexicans and the particle *in*. *Reverse viewing* occurred with some meanings, sometimes more among the Croats and sometimes more among the Mexicans.

### **2.3.1.2 Particle verbs containing heavy verbs**

In this subsection, we analyse the PVs containing the heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particles *in* and *out*. There were 745 verbal answers (357 for *in* and 388 for *out*) and 744 pictorial representations (358 for *in* and 386 for *out*). Here is the list of all the PVs and their meanings:

- 1) *call in* ('make a short visit, usually on the way to another place'; 'send for somebody professional and official'; 'make a public request for a product to be returned');
- 2) *call out* ('ask somebody to come and help you when there is an emergency');
- 3) *cut in* ('interrupt somebody's conversation');
- 4) *cut out* ('prevent something from reaching somewhere'; 'stop doing something'; 'stop working');



- 5) *break in* ('wear something until it is comfortable'; 'get somebody accustomed to something new'; 'interrupt a conversation');
- 6) *break out* ('become covered in something, like in sweat or rash'; 'begin suddenly'; 'escape');
- 7) *draw in* ('become dark earlier as winter approaches');
- 8) *draw out* ('make something last longer'; 'make somebody feel less nervous or shy');
- 9) *pull in* ('attract people in large numbers'; 'move to the side of the road to stop');
- 10) *pull out* ('stop being involved in something');
- 11) *shut in* ('trap or injure something by closing something tightly around it');
- 12) *shut out* ('refuse to allow a person to share your thoughts, feelings etc. '; 'stop something from entering');
- 13) *write in* ('write to ask or complain');
- 14) *write out* ('write something and include all the necessary information').

#### 2.3.1.2.1 *call in and call out*

In the next section we analyse the verbal answers and pictorial representations of the PVs *call in* and *call out* and their meanings. Overall there were 119 verbal answers and 119 pictorial representations.

There were 89 verbal answers and 89 pictorial representations of *call in*. We analysed the following meanings:

- 1) 'make a short visit, usually on the way to another place';
- 2) 'send for somebody professional and official';
- 3) 'make a public request for a product to be returned'.

There were 30 verbal answers and 30 pictorial representations of *call out*. We analysed the following meaning:

- 1) 'ask somebody to come and help you when there is an emergency'.

##### 2.3.1.2.1.1 *call in* ('make a short visit, usually on the way to another place')

There were **29/30** verbal answers and pictorial representations of the particle verb *call in* and its meaning 'make a short visit, usually on the way to another place'.

In **the verbal answers**, among **the Croats** there were **2** topological answers, **10** compositional answers, **1** lexical answer, **1** paraphrase, and **1** misinterpretation. **The Mexicans** gave **0** topological answers, **2** compositional answers, **4** lexical answers, **6** paraphrases, **2** misinterpretations, and **1** no text.

There were two topological answers about *call in* in this meaning (Cro 2/15). The most typical answers among the Croats were compositional (Cro 10/15 vs. Mex 2/14) and among the Mexicans lexical answers (Cro 1/15 vs. Mex 4/14) and paraphrases (Cro 1/15 vs. Mex 6/14). The most prototypical compositional answer included – *call* as *saying hi* and *going into somebody’s house + for a short period of time*. For *call*, they used synonyms like – *say* and *ask*. Lexical content included – *making a phone call to let people know you are going to visit them*. Paraphrases included *visiting somebody* and usually *without letting them know*. Misinterpretations included – *somebody calling you out from the inside of the house to come in* (you are not the one doing the action) (Cro 1/15 vs. Mex 2/14); *something calling your attention while you are walking*, and *you are calling one’s door* (mistranslation of *llamar a la puerta*<sup>4</sup> – a phrase meaning *knock on the door*; *llamar*<sup>5</sup> also means *to call*).

Here are the examples of all the categories we had:

- 1) TOP – “To call in means to show up somewhere by entering into that place”
- 2) CMP – “‘call’ meaning to say ‘hi’ to pay a visit, ‘in’ means to go in and see somebody, interrupt them while they are doing something”
- 3) LEX – “when someone uses a telephone, in a way you are in the place where you called, so you, by phoning, come into that place briefly”
- 4) PPH – “drop by someone’s place without being asked to beforehand”
- 5) MIS – “attention being called briefly by some place”

In **the pictorial representations, the Croats** drew **2** topological drawings, **7** compositional drawings, **1** lexical drawing, **4** visual paraphrases and **1** misinterpretation. **The Mexicans** drew **0** topological, **2** compositional drawings, **3** lexical drawings, **6** visual paraphrases, **3** misinterpretations and **1** no picture.

There were only 2 topological drawings (Cro 2/15). They included *a person going into a house*. There was no *call* in the drawing. Compositional drawings (Cro 7/15 vs. Mex 2/14) also included *a person going into a house*, but also *a speech bubble* above the person’s head denoting *call*, or less frequently *call* was – *a megaphone, an arrow* going from the person’s head *into* the house or it was written somewhere.

Just like in the verbal answers, the most prototypical drawings among the Croats were compositional (Cro 7/15 vs. 2/14) and among the Mexicans lexical (Cro 1/15 vs. 3/14) and visual paraphrases (Cro 4/15 vs. Mex 6/14). Lexical content was demonstrated by – *making a phone call*. Visual paraphrases included *visiting somebody*.

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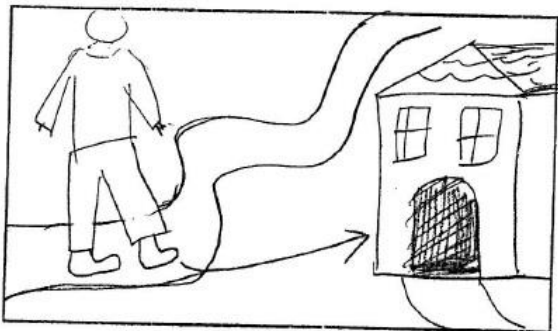
<sup>4</sup> to knock, to ring, to ring the doorbell (Oxford, 2017)

<sup>5</sup> to call, to phone (Oxford, 2017)

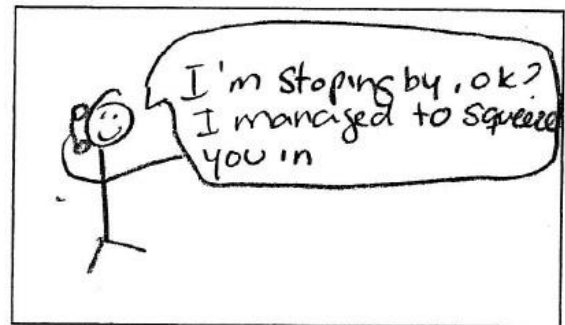
It was interesting to see there were more misinterpretations among the Mexicans (Cro 1/15 vs. Mex 3/14). They included – *somebody calling you out from the inside of the house to come in* (Cro 1/2 MIS vs. Mex 1/3 MIS), *something calling your attention while you are walking* and *a person + a parachute scenario* (Mex 2/3 MIS). There were drawings where somebody was knocking on somebody's door, but *call* was not written anywhere. Thus, those were considered visual paraphrases and not misinterpretations of *llamar a la puerta*.

Here are the examples of all the categories we had:

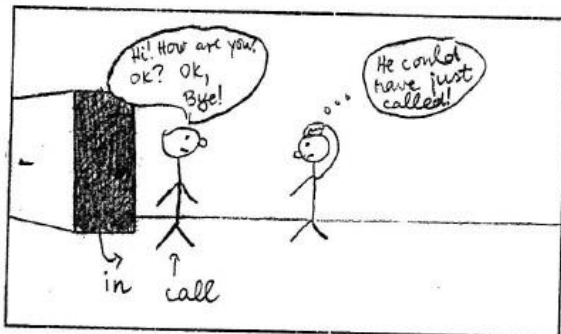
1) TOP



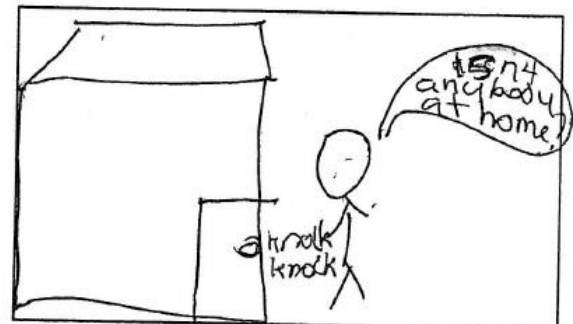
3) LEX



2) CMP

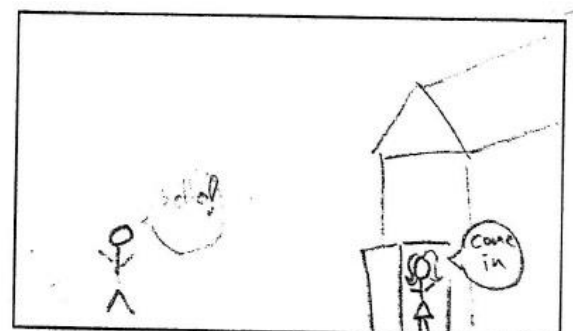
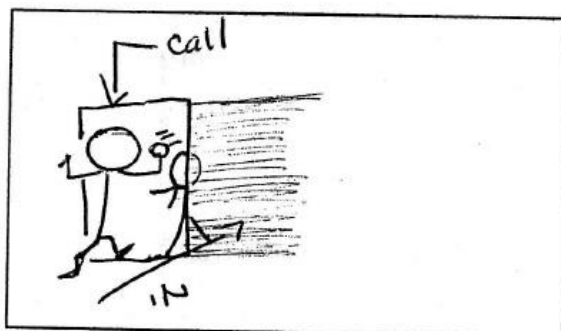


4) PPH



CMP 2

5) MIS



#### 2.3.1.2.1.2 *call in* ('send for somebody professional and official')

There were **30/30** verbal answers and pictorial representations of the particle verb *call in* and its meaning 'send for somebody professional and official'.

In **the verbal answers**, among **the Croats** there was **0** topological answers, **11** compositional answers, **3** lexical answers, and **1** paraphrase. **The Mexicans** gave **0** topological answers, **8** compositional answers, **4** lexical answers, and **3** paraphrases.

There were no topological answers about *call in* in this meaning. The most prototypical answers among both groups were compositional (Cro 11/15 vs. Mex 8/15). They included – *call + somebody professional + to come into your home/into the place where you are*. For *call* they sometimes used synonyms like – *ask, invite, and summon*. In the rest of answers, both groups showed tendencies towards lexical determination (Cro 3/15 vs. Mex 4/15). Lexical answers included *call + somebody professional*. Paraphrases (Cro 1/15 vs. Mex 3/15) were about 'send for somebody professional and official'.

Here are the examples of all the categories we had:

- 1) TOP – /
- 2) CMP – “'Call' – express your wish for somebody to come to you, near you, 'in' your personal sphere, let's say. You don't call just anyone to enter this sphere, it has to be somebody special – a professional /official”
- 3) LEX – “have the detective called to solve a case”
- 4) PPH – “you need someone to come to you and help you, they need to get to where you are”
- 5) MIS – /

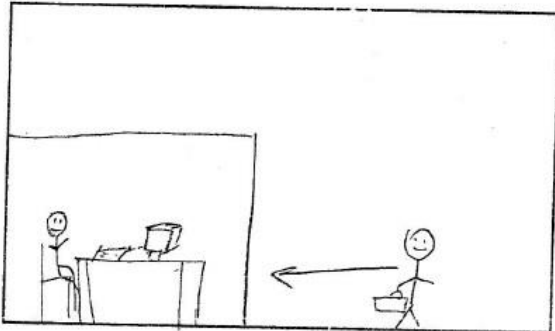
In **the pictorial representations**, **the Croats** drew **3** topological drawings, **5** compositional drawings, **6** lexical drawings, **1** paraphrase. **The Mexicans** drew **0** topological, **4** compositional drawings, **6** lexical drawings, and **5** visual paraphrases.

There were topological drawings only among the Croats (Cro 3/15) and they included – *professionals going into a place of difficulty/into a house*. There was clear direction from *out* to *in*. Compositional drawings (Cro 5/15 vs. Mex 4/15) included *a professional + called into a house/place/sphere where you are*. Both *call* and *in* were shown in different ways. *Call* was demonstrated by – *speech bubbles*, a written *call* above a person's head or *a phone call*. For *in* they used *spheres* and *arrows* and/or put the speech bubble halfway out (*the door*) *calling* the person *in*. Unlike in the verbal answers, where both groups showed more tendencies towards compositionality, here most drawings were lexical (Cro 6/15 vs. Mex 6/15). Lexical content was usually demonstrated by *a person making a phone call*. In the rest

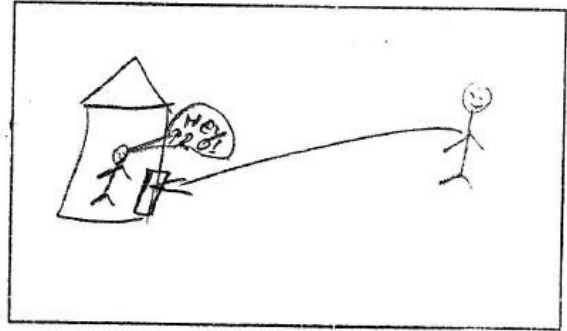
of the answers, the Mexicans leaned more towards the visual paraphrases (Cro 1/15 vs. Mex 5/15). Visual paraphrases included scenarios like – a *repairman coming to fix something*.

Here are the examples of all the categories we had:

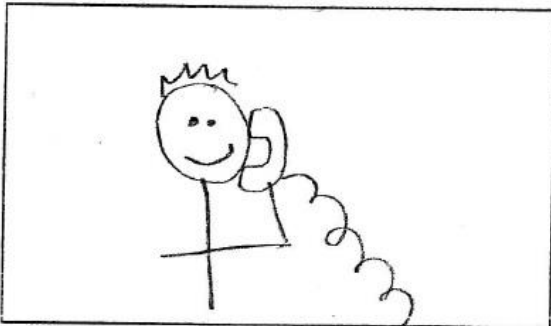
1) TOP



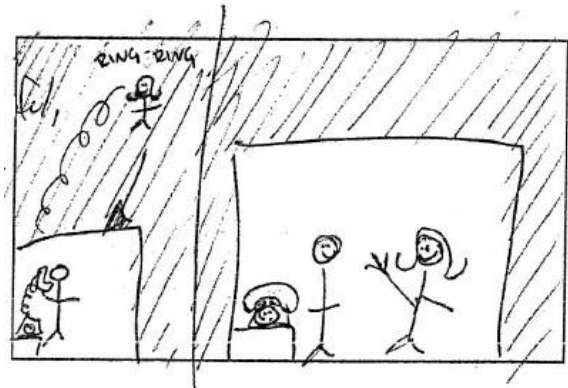
2) CMP



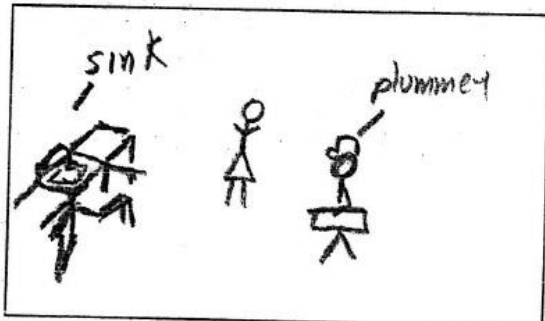
3) LEX



CMP 2



4) PPH



#### 2.3.1.2.1.3 *call in* ('make a public request for a product to be returned')

There were **30/30** verbal answers and pictorial representations of the particle verb *call in* and its meaning 'make a public request for a product to be returned'.

In **the verbal answers**, among **the Croats** there was **0** topology, **8** compositional answers, **2** paraphrases, and **5** misinterpretations. **The Mexicans** gave **0** topological answers, **2** compositional and **6** lexical answers, **1** paraphrase, and **6** misinterpretations.

There was no topology in the answers. Most answers about *call in* in this meaning were compositional (Cro 8/15 vs. Mex 2/15). Compositional answers usually included – *call somebody/people + to return the product + into the company* or *call for a product + to come*

*back + into the factory*. The Mexicans showed more tendencies towards the lexical content (Mex 6/15). Those answers usually included – *call (into) the public to return the product*. It was interesting to see that in the rest of the answers there were many misinterpretations (Cro 5/15 vs. Mex 6/15). They included – *you call the company and say you want to return the product into the company, you call into the company to return the product, you go into the company and use the phone there to call them and complain, you call the company to start making an outdated product again, and you collect some info from the outside*.

Here are the examples of all the categories we had:

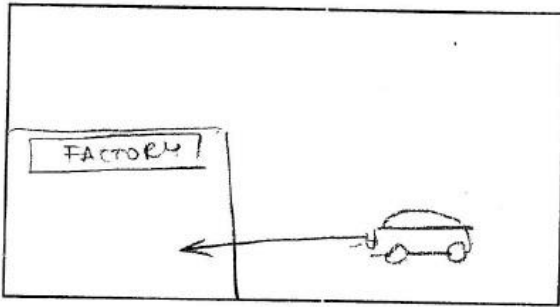
- 1) TOP – /
- 2) CMP – “call – you imagine a product is alive, so you call it in – you want it to return in(to) its original place”
- 3) LEX – “calling implies the action of speaking or doing something in order to ask or attract somebody’s attention and also to get something from it”
- 4) PPH – “if you call in, you put a commercial in the media saying a certain product is not good and that it should be returned”
- 5) MIS – “if you ‘call’ the company that sold you a bad product (‘in’), that is a public request I guess. And then you say you want to return the product (send it back to get ‘in’ the company again)”

In **the pictorial representations, the Croats** drew **2** topological drawings, **4** compositional drawings, **2** lexical drawings, **3** visual paraphrases, and **4** misinterpretations. **The Mexicans** drew **0** topological drawings and **0** compositional drawings, **4** lexical drawings, **4** visual paraphrases, and **7** misinterpretations.

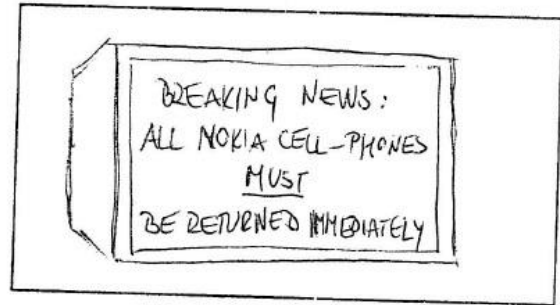
There was topology only among the Croats (Cro 2/15). Both drawings included – *a product going back into the factory*. The most prototypical compositional drawing (Cro 4/15) included – *a person calling a product back in*. Call was demonstrated by – *speech bubbles or an arrow coming out of a person’s mouth* (another arrow towards inside denoted *a product going back in*). Lexical drawings (Cro 2/15 vs. 4/15) included – *call (into) the public to get the product back*. Unlike in the verbal answers, both groups here showed more tendencies towards the visual paraphrases (Cro 3/15 vs. Mex 4/15). Visual paraphrases included – *a public request to return a product or a person returning a product*. It was interesting to see there were also many misinterpretations – more so among the Mexicans (Mex 7/15) than among the Croats (Cro 4/15). They included scenarios like the ones in the verbal answers.

Here are the examples of all the categories we had:

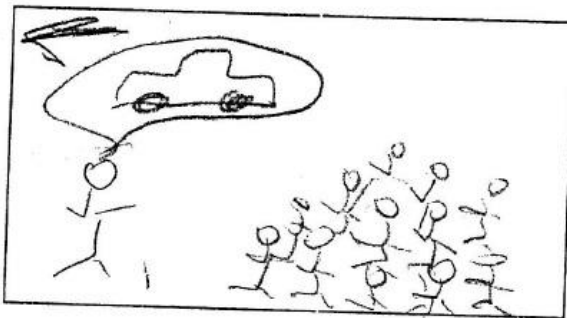
1) TOP



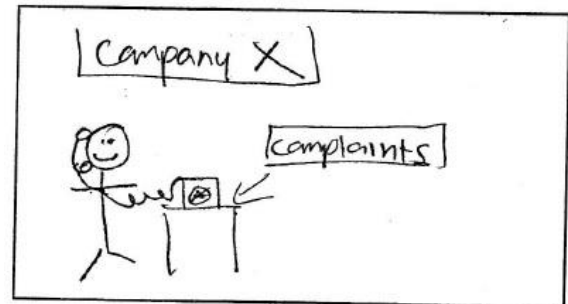
4) PPH



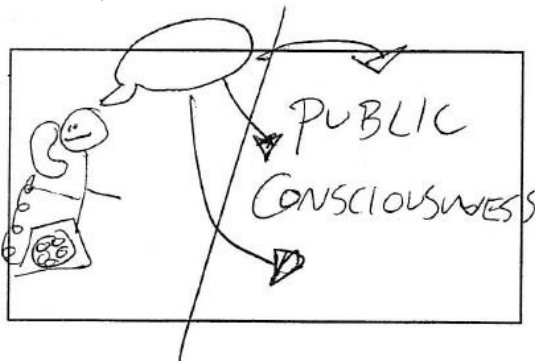
2) CMP



5) MIS



3) LEX



#### 2.3.1.2.1.4 *call out* ('ask somebody to come and help you when there is an emergency')

There were **30/30** verbal answers and pictorial representations of the particle verb *call out* and its meaning 'ask somebody to come and help you when there is an emergency'.

In **the verbal answers**, among **the Croats** there was **1** topological answer, **6** compositional answers, **3** lexical answers, **1** paraphrase, and **4** misinterpretations. **The Mexicans** gave **2** topological answers, **4** compositional answers, **4** lexical answers, **2** paraphrases, and **3** misinterpretations.

There were 3 topological answers about *call out* in this meaning (Cro 1/15 vs. Mex 2/15). They included – *call + outside of yourself/your domain/trouble*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 6/15 vs. Mex 4/15) and lexical determination (Cro 3/15 vs. Mex 4/15). Compositional answers included –

*call + somebody* and *out – outside of the places closest to you*. Lexical answers included descriptions of *yelling* and *a phone call*. For the verb they used synonyms like – *ask, shout, yell*. It was interesting to see that there were misinterpretations in both groups (Cro 4/15 vs. Mex 3/15). They included – *call somebody + to come out of their house and help you*.

Here are the examples of all the categories we had:

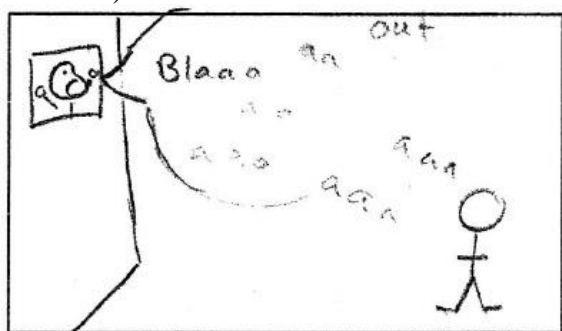
- 1) TOP – “calling outside of yourself so as to attract someone who’ll help”
- 2) CMP – “you ‘call’ somebody when there is something important and you want to be heard; ‘out’ – a bigger area, outside of the places closest to you”
- 3) LEX – “call is to phone someone”
- 4) PPH – “get some reinforces [sic] to deal with a dangerous situation”
- 5) MIS – “you need help, quickly, and you call people to come out (of their houses, offices of what they’re doing at the moment) to help you”

In the pictorial representations, the Croats drew 0 topological drawings, 4 compositional drawings, 2 lexical drawings, 6 visual paraphrases and 3 misinterpretations. The Mexicans drew 0 topological drawings, 3 compositional drawings, 5 lexical drawings, 4 visual paraphrases, and 3 misinterpretations.

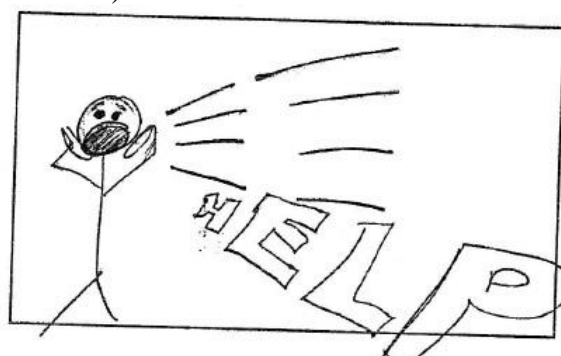
There were no topological drawings. Compositional drawings (Cro 4/15 vs. Mex 3/15) included – *a person + call for help + outside of a window (house) or a sphere where they are*. For *call* they used *speech bubbles* or – *arrows/words were coming out of a person’s mouth*. In the rest of the drawings, the Croats showed more tendencies towards visual paraphrases (Cro 6/15 vs. Mex 4/15) and the Mexicans towards lexical determination (Cro 2/15 vs. Mex 5/15). The lexical content included – *a person calling for help* (with or without *speech bubbles*). In the visual paraphrases, there were different *people scenarios* – asking somebody for *help* or *an emergency*. Misinterpretations (Cro 3/15 vs. Mex 3/15) included – *calling somebody to come outside of their house and help you*.

Here are the examples of all the categories we had:

2) CMP

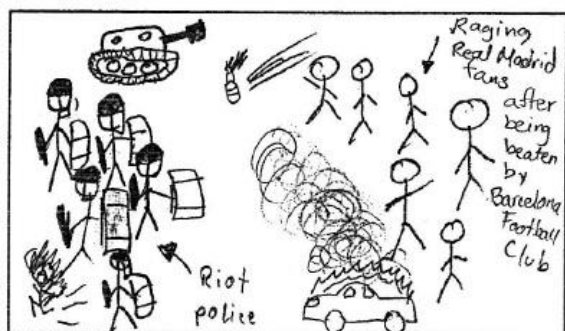


3) LEX

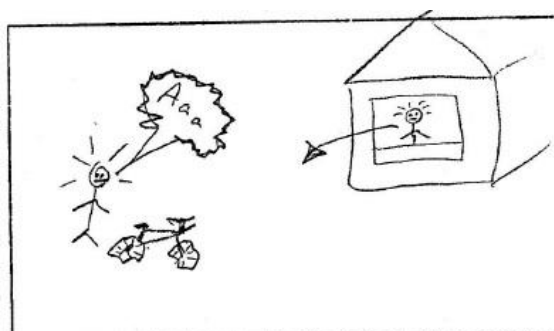




4) PPH



5) MIS



### 2.3.1.2.1.5 Discussion and Conclusions: *call in* and *call out*

In conclusion, in the verbal answers for *call in* and all its meanings ('make a short visit, usually on the way to another place'; 'send for somebody professional and official'; 'make a public request for a product to be returned'), there was almost no topology among both groups. The Croats showed more tendencies towards compositionality than the Mexicans in most meanings of *call in*, while the Mexicans showed more tendencies towards lexical determination. Some of the answers for certain meanings of *call in* also included many misinterpretations (Table 17).

Table 17. Results of the verbal answers for the PV *call in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>CALL IN</b> (‘make a short visit, usually on the way to another place’)	2	10	1	1	1	-	-	2	4	6	2	1
<b>CALL IN</b> (‘send for somebody professional and official’)	-	11	3	1	-	-	-	8	4	3	-	-
<b>CALL IN</b> (‘make a public request for a product to be returned’)	-	8	-	2	5	-	-	2	6	1	6	-

In the verbal answers for *call out* and its one meaning ('ask somebody to come and help you when there is an emergency'), both groups showed tendencies towards compositionality, lexical determination, and misinterpretations (Table 18).

Table 18. Results of the verbal answers for the PV call out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
CALL OUT (‘ask somebody to come and help you when there is an emergency’)	1	6	3	1	4	-	2	4	4	2	3	-

However, in the drawings of *call in* and all its meanings (‘make a short visit, usually on the way to another place’; ‘send for somebody professional and official’; ‘make a public request for a product to be returned’), there was more topology than in the verbal answers but only among the Croats. Compositionality occurred more among the Croats with most of the meanings of *call in*. However, lexical determination, unlike in the verbal answers, occurred almost equally among both groups. Some of the drawings of certain meanings of *call in* also included many misinterpretations, especially among the Mexicans (Table 19).

Table 19. Results of the pictorial representations of the PV call in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
CALL IN (‘make a short visit, usually on the way to another place’)	2	7	1	4	1	-	-	2	3	6	3	-
CALL IN (‘send for somebody professional and official’)	3	5	6	1	-	-	-	4	6	5	-	-
CALL IN (‘make a public request for a product to be returned’)	2	4	2	3	4	-	-	-	4	4	7	-

In the drawings of *call out* (‘ask somebody to come and help you when there is an emergency’), unlike with *call in*, there was no topology, but both groups showed tendencies towards compositionality. Lexical determination was more typical for the Mexicans. Visual paraphrases and misinterpretations also occurred among both groups (Table 20).

Table 20. Results of the pictorial representations of the PV call out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
CALL OUT (‘ask somebody to come and help you when there is an emergency’)	-	4	2	6	3	-	-	3	5	4	3	-

### 2.3.1.2.2 *cut in and cut out*

In the next section we analyse the verbal answers and pictorial representations of the PVs *cut in* and *cut out* and their meanings. Overall there were 120 verbal answers and 120 pictorial representations.

There were 30 verbal answers and 30 pictorial representations of *call in*. We analysed the following meaning:

- 1) ‘interrupt somebody’s conversation’.

There were 90 verbal answers and 90 pictorial representations of *call out*. We analysed the following meaning:

- 1) ‘prevent something from reaching somewhere’;
- 2) ‘stop doing something’;
- 3) ‘stop working’.

#### 2.3.1.2.2.1 *cut in* (‘interrupt somebody’s conversation’)

There were **30/30** verbal answers and pictorial representations of the particle verb *cut in* and its meaning ‘interrupt somebody’s conversation’.

In **the verbal answers**, among **the Croats** there was **1** topological answer, **13** compositional answers, and **1** paraphrase. **The Mexicans** gave **1** topological answer, **8** compositional answer, **4** lexical answers, and **2** paraphrases.

Topological answers (Cro 1/15 vs. Mex 1/15) included – *introduction/interruption into somebody’s conversation/line of thinking*. The most prototypical answers among the Croats were compositional (Cro 13/15) and among the Mexicans compositional (Mex 8/15) and lexical (Mex 4/15). The most prototypical compositional answer included – *you cut somebody’s conversation and you get inside of that conversation*. Some used *break* as a synonym for *cut*. Lexical answers usually included *cut + somebody’s conversation*. It was interesting to see that in both the lexical and many compositional answers the participants

described the conversation as – *a thread, a line, a cord, a stream, a flow, a sequence, or a body*. One participant described it as *a physical element* that you have to *cut* to then go *in*. It was easier to describe *cut* if there was something *physical* to cut.

Here are the examples of all the categories we had:

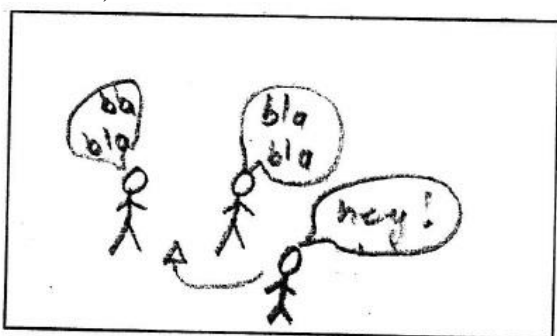
- 1) TOP – “if you cut somebody in, you stop them from talking by introducing yourself into the conversation”
- 2) CMP – “‘Cut’ would be a sort of a break of something, ‘in’ to go into a certain place. So to go into a conversation and stopping an earlier one”
- 3) LEX – “cut the established flow of conversation in half”
- 4) PPH – “entering without being asked to”
- 5) MIS – /

In **the pictorial representations, the Croats** drew **2** topological drawings, **6** compositional drawings, **3** lexical drawings, and **4** visual paraphrases. **The Mexicans** drew **1** topological drawing, **3** compositional drawings, **3** lexical drawings, **8** visual paraphrases.

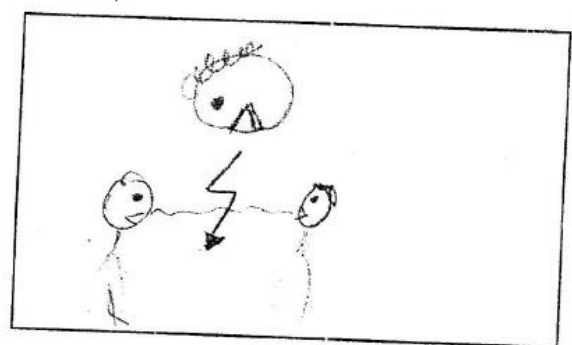
There were 3 topological drawings about *cut in* in this meaning (Cro 2/15 vs. Mex 1/15). They included *a conversation scenario – a person going into a conversation between two people* with an *arrow* denoting the direction – *in*. Compositional drawings (Cro 6/15 vs. Mex 3/15) also included *conversation scenarios – a person going into a conversation between two people + cut*. *Cut* was demonstrated in different ways – it was either written *along the arrow (direction)* or there was *a cut/a break* visible. In one case (Cro 1/6 CMP) there was a *zig zag arrow*, and two cases included *scissors* (Cro 1/6 CMP vs. Mex 1/3 CMP). Lexical drawings (Cro 3/15 vs. Mex 3/15) included *a person cutting the thread of conversation between two people* using *scissors*. In the rest of the answers, both groups showed tendencies towards visual paraphrases (Cro 4/15 vs. Mex 8/15). They included – *conversation scenarios* and *a person interrupting a conversation between two people*.

Here are the examples of all the categories we had:

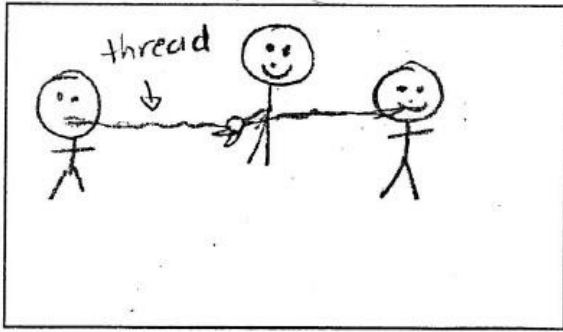
1) TOP



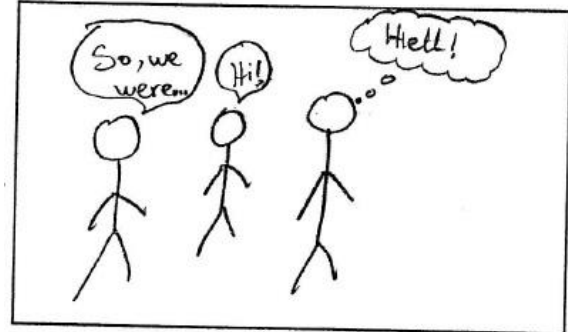
2) CMP



3) LEX



4) PPH



2.3.1.2.2.2 *cut out* ('prevent something from reaching somewhere')

There were **30/30** verbal answers and pictorial representations of the particle verb *cut out* and its meaning 'prevent something from reaching somewhere'.

In **the verbal answers**, among **the Croats** there was **1** topological answer, **11** compositional answers, **1** lexical answer, and **2** paraphrases. **The Mexicans** gave **1** topological answer, **2** compositional answers, **6** lexical answers, and **6** paraphrases.

There were only 2 topological answers about *cut out* in this meaning (Cro 1/15 vs. Mex 1/15). They included – *leaving something out*, and *you cut something out from the path*. The most typical answers among the Croats were compositional (Cro 11/15 vs. Mex 2/15) and among the Mexicans lexical (Cro 1/15 vs. Mex 6/15) and paraphrases (Cro 2/15 vs. Mex 6/15). The most prototypical compositional answer included – *cut somebody's path and they are out of the way*. It was interesting to see that 4 Croats assigned the following meaning to the particle *out* – *negative, absent, displace and far away*. Lexical answers also included – *cut somebody's path*. Paraphrases included 'prevent something from reaching somewhere'.

Here are the examples of all the categories we had:

- 1) TOP – "you cut it out from the path that would lead it to reach something"
- 2) CMP – "you cut their path, so they can't cross it and they stay out of the place they were supposed to reach"
- 3) LEX – "if a body had a tumor, the tumor is cut so it won't get bigger"
- 4) PPH – "when you get in the middle of someone's way"
- 5) MIS – /

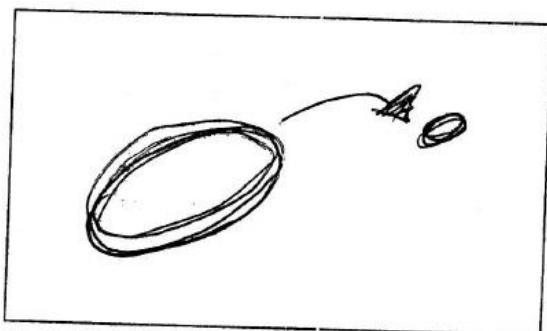
In **the pictorial representations**, **the Croats** drew **1** topological drawing, **5** compositional drawings, **1** lexical drawing, and **8** visual paraphrases. **The Mexicans** drew **0** topological drawings, **1** compositional drawing, **5** lexical drawings, **9** visual paraphrases.

The one topological drawing (Cro 1/15) included – *something going out of something*. Compositional drawings (Cro 5/15 vs. Mex 1/15) included – *something cut out of its path*. *Cut* was shown by a zig zag arrow going out or it was written in the drawing. Lexical drawings (Cro 1/15 vs. Mex 5/15) included a person cutting a path using scissors.

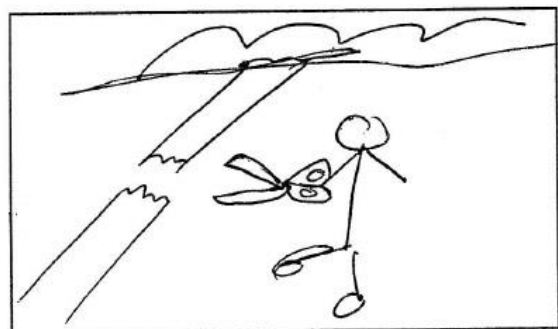
Unlike in the verbal answers, here both groups showed more tendencies towards visual paraphrases (Cro 8/15 vs. Mex 9/15). They included *obstacles*.

Here are the examples of all the categories we had:

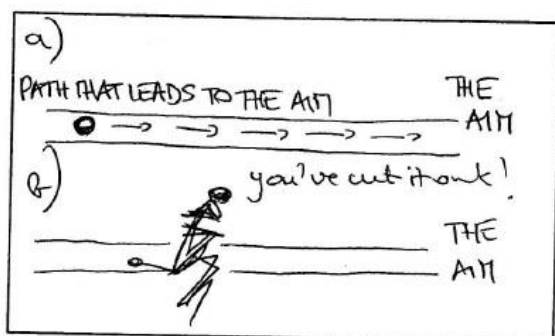
1) TOP



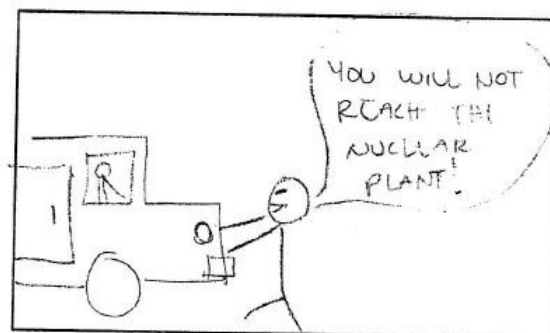
3) LEX



2) CMP



4) PPH



### 2.3.1.2.2.3 *cut out* ('stop doing something')

There were **30/30** verbal answers and pictorial representations of the particle verb *cut out* and its meaning 'stop doing something'.

In the verbal answers, among the Croats there was **3** topological answers, **10** compositional answers, and **2** paraphrases. The Mexicans gave **1** topological answer, **4** compositional answers, **8** lexical answers, and **2** paraphrases.

There were more topological answers about *cut out* in this meaning among the Croats (Cro 3/15) than among the Mexicans (Mex 1/15). They included – *work + cut + out of an activity* or *you + cut + yourself + out the activity*. The most typical answers among the Croats were compositional (Cro 10/15 vs. Mex 4/15), and among the Mexicans lexical (Mex 8/15). The prototypical compositional answer included – *cut/break/stop the work* and *go out of it/take a part of it out*. Lexical answers included – *cut the work/action*. It was interesting to

see that 4 Croats and 2 Mexicans assigned the following meanings to the particle *out* – *end, gone, away, completely, no more, no longer acceptable, and forsaken.*

Here are the examples of all the categories we had:

- 1) TOP – “when you stop doing something you cut yourself out from the process of doing that activity”
- 2) CMP – “there is a continuum (of an operation) and then you cut it and take out one ‘piece’ of it, due to which the operations stops”
- 3) LEX – “cut the action one is performing”
- 4) PPH – “if somebody cuts out, he suddenly stops doing something”
- 5) MIS – /

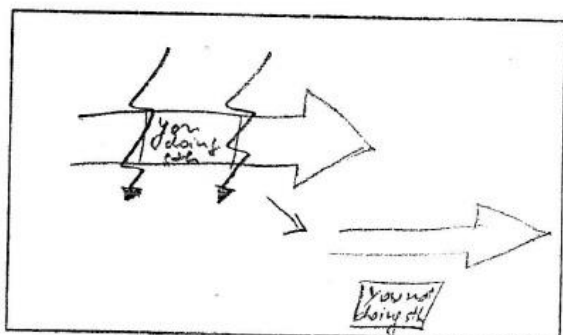
In the pictorial representations, the Croats drew 0 topological drawings, 5 compositional drawings, 4 lexical drawings, and 6 visual paraphrases. The Mexicans drew 0 topological drawings, 1 compositional drawing, 6 lexical drawings, 8 visual paraphrases.

There were no topological drawings. Compositional drawings (Cro 5/15 vs. Mex 1/15) included – *cut + work/conversation/something + out*. For *cut* they used *scissors, zig zag arrows or X*. The most prototypical lexical drawing (Cro 4/15 vs. Mex 6/15) included *cut work using scissors*, but there was also one with *a hatchet – chopping a tree* (Mex 1/6 LEX) and one included – *break something* (Mex 1/6 LEX).

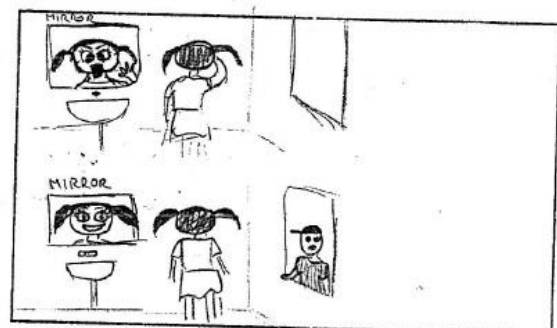
Unlike in the verbal answers, where the Croats showed more tendencies towards compositionality and the Mexicans towards lexical determination, here both groups showed more tendencies towards the visual paraphrases (Cro 6/15 vs. Mex 8/15). They included ‘stop doing something’, very often – *stop reading a book*.

Here are the examples of all the categories we had:

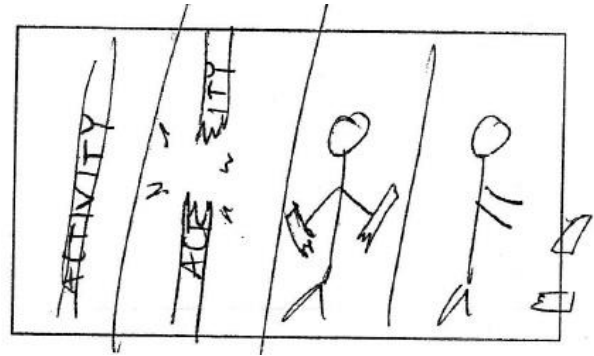
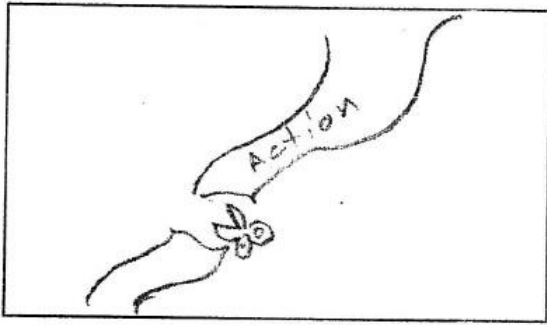
2) CMP



4) PPH



### 3) LEX and LEX 2



#### 2.3.1.2.2.4 *cut out* ('stop working')

There were **30/30** verbal answers and pictorial representations of the particle verb *cut out* and its meaning 'stop working'.

In the **verbal answers**, among the **Croats** there was **2** topological answers, **9** compositional answers, **2** lexical answers and **2** paraphrases. **The Mexicans** gave **0** topological answers, **4** compositional answers, **6** lexical answers, and **5** paraphrases.

There were 2 topological answers about *cut out* in this meaning (Cro 2/15). They included – *cut + something + out of working properly* and *cut + yourself + out from work*. The most typical answers among the Croats were compositional (Cro 9/15 vs. Mex 4/15) and among the Mexicans lexical (Cro 2/15 vs. Mex 6/15) and paraphrases (Cro 2/15 vs. Mex 5/15). Compositional answers included – *cut/break the work/cable/source of energy and go out of it/something is out of order*. Lexical answers included – *cut/break the (thread of) work/activity*. It was interesting to see that 3 Croats and 1 Mexican assigned the following meanings to the particle *out* – *absence, broken, dead, completely, and abandoned*.

Here are the examples of all the categories we had:

- 1) TOP – “you cut yourself out from the process of working so you stop working”
- 2) CMP – “to cut the obligation to work and go out of the building where you work”
- 3) LEX – “cut the course of actions”
- 4) PPH – “finish doing something, you quit it”
- 5) MIS – /

In the **pictorial representations**, the **Croats** drew **1** topological drawing, **4** compositional drawings, **5** lexical drawings, and **5** visual paraphrases. **The Mexicans** drew **0** topological drawings, **3** compositional drawings, **5** lexical drawings, **7** visual paraphrases.

There was only 1 topological drawing (Cro 1/15). It included – *a person going out of the working process*. Compositional drawings (Cro 4/15 vs. Mex 3/15) included – *somebody/*

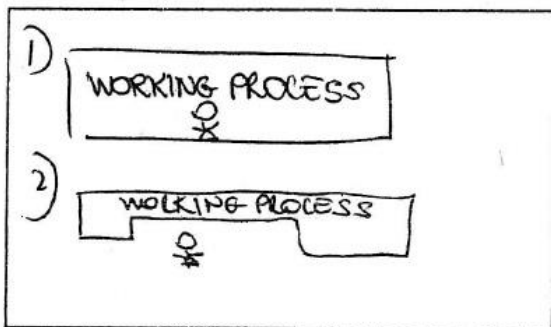


something going out of the work process/sphere/company and in 3 cases work/energy going out of you/out of something (Mex 3/3 CMP). Cut was either written, or an X or break. In one case (Cro 1/2 CMP) cut was implied because there was a triangle going out of the work circle.

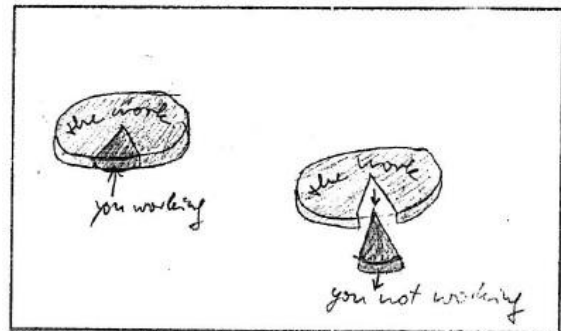
Unlike in the verbal answers, here both groups showed more tendencies towards lexical determination (Cro 5/15 vs. Mex 5/15) or the visual paraphrases (Cro 5/15 vs. 7/15). The most prototypical lexical drawing included – *cut work using scissors* and in one case – *chopping trees using a hatchet*. Visual paraphrases included – ‘stop working’.

Here are the examples of all the categories we had:

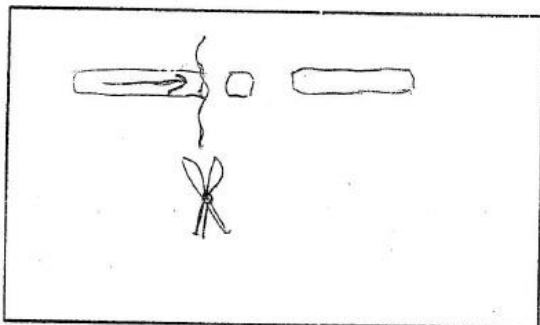
1) TOP



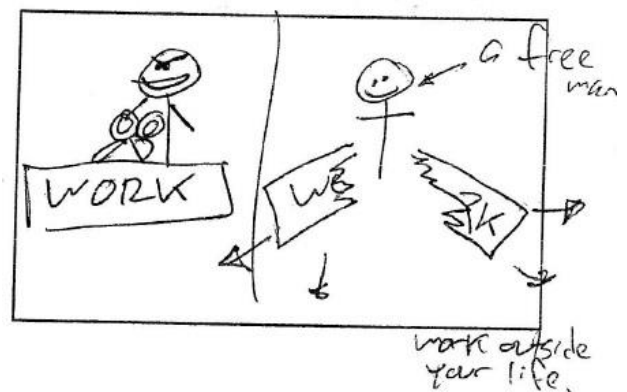
2) CMP



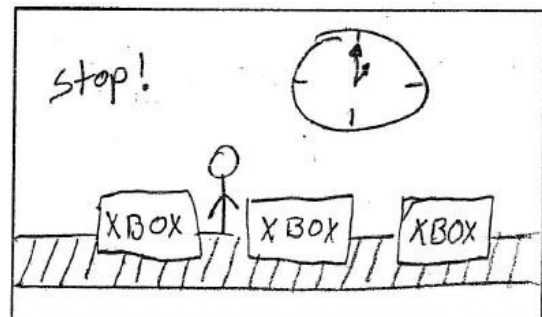
3) LEX



CMP – R



4) PPH



### 2.3.1.2.2.5 Discussion and Conclusions: *cut in* and *cut out*

In conclusion, in the verbal answers for *cut in* ('interrupt somebody's conversation') and *cut out* and all its meanings ('prevent something from reaching somewhere'; 'stop doing something'; 'stop working'), there was almost no topology (Table 21; Table 22). Compositionality occurred significantly more among the Croats, especially with the PV *cut out*. Lexical determination occurred more among the Mexicans. Some participants assigned the following meanings to the particle *out* – *abandoned, absence, absent, away, broken, completely, dead, displace, end, far away, forsaken, gone, negative, no longer acceptable, no more*. It occurred significantly more among the Croats.

Table 21. Results of the verbal answers for the PV *cut in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and <i>IN</i>	T O P	C M P	L E X	P H	M I S	N T	T O P	C M P	L E X	P H	M I S	N T
CUT IN (‘interrupt somebody’s conversation’)	1	13	-	1	-	-	1	8	4	2	-	-

Table 22. Results of the verbal answers for the PV *cut out*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and <i>OUT</i>	T O P	C M P	L E X	P H	M I S	N T	T O P	C M P	L E X	P H	M I S	N T
CUT OUT (‘prevent something from reaching somewhere’)	1	11	1	2	-	-	1	2	6	6	-	-
CUT OUT (‘stop doing something’)	3	10	2	-	-	-	1	4	8	2	-	-
CUT OUT (‘stop working’)	2	9	2	2	-	-	-	4	6	5	-	-

In the pictorial representations of *cut in* and *cut out*, there was again almost no topology (Table 23; Table 24). Compositionality generally occurred more among the Croats. However, unlike in the verbal answers where the Mexicans showed more tendencies towards lexical determination, here both groups showed tendencies towards lexical determination. There were also many visual paraphrases among both groups.

Table 23. Results of the pictorial representations of the PV cut in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
CUT IN (‘interrupt somebody’s conversation’)	2	6	3	4	-	-	1	3	3	8	-	-

Table 24. Results of the pictorial representations of the PV cut out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
CUT OUT (‘prevent something from reaching somewhere’)	1	5	1	8	-	-	-	1	5	9	-	-
CUT OUT (‘stop doing something’)	-	5	4	6	-	-	-	1	6	8	-	-
CUT OUT (‘stop working’)	1	4	5	5	-	-	-	3	5	7	-	-

### 2.3.1.2.3 break in and break out

In the next section we analyse the verbal answers and pictorial representations of the PVs *break in* and *break out* and their meanings. Overall there were 180 verbal answers and 178 pictorial representations.

There were 90 verbal answers and 90 pictorial representations of *break in*. We analysed the following meanings:

- 1) ‘wear something until it is comfortable’;
- 2) ‘get somebody accustomed to something new’;
- 3) ‘interrupt a conversation’.

There were 90 verbal answers and 88 pictorial representations of *break out*. We analysed the following meanings:

- 1) ‘become covered in something, like in sweat or rash’;
- 2) ‘begin suddenly’;
- 3) ‘escape’.

#### 2.3.1.2.3.1 *break in* ('wear something until it is comfortable')

There were **30/30** verbal answers and pictorial representations of the particle verb *break in* and its meaning 'wear something until it is comfortable'.

In **the verbal answers**, among **the Croats** there was **0** topological answers, **9** compositional answers, **3** lexical answers, **2** paraphrases, and **1** misinterpretation. **The Mexicans** gave **0** topological answers, **4** compositional answers, **6** lexical answers, **3** paraphrases, and **2** misinterpretations.

There were no topological answers about *break in* in this meaning. The most typical answers among the Croats were compositional (Cro 9/15 vs. Mex 4/15) and among the Mexicans lexical (Cro 3/15 vs. Mex 6/15). The most prototypical compositional answer included – *break something/clothes and then go in it* or vice versa. Some used synonyms for *break* like – *give, stretch, and adjust*. Lexical answers included – *breaking clothes*. Paraphrases (Cro 2/15 vs. Mex 3/15) included – 'wear something until it is comfortable'.

Here are the examples of all the categories we had:

- 1) TOP – /
- 2) CMP – “things are made in molds but people’s bodies are all different so we have to fit into something by breaking the mold”
- 3) LEX – “break the stiffness of clothing by wearing it”
- 4) PPH – “it would mean that we have to cross some type of limit, in this case, the limit where something causes no more pain”
- 5) MIS – “a good example would be: ‘the police broke in the thief’s hide out’; it would be like entering some place by force”

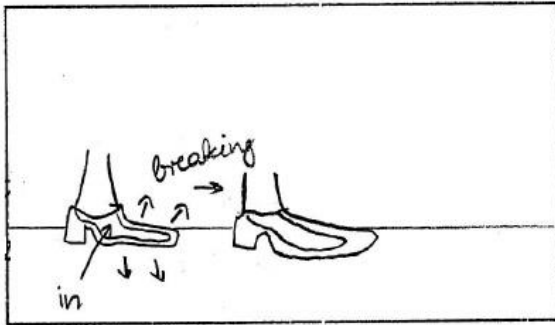
In **the pictorial representations**, **the Croats** drew **0** topological drawings, **4** compositional drawings, **4** lexical drawings, and **7** visual paraphrases. **The Mexicans** drew **0** topological drawings, **2** compositional drawings, **4** lexical drawings, **9** visual paraphrases.

Just like in the verbal answers, there was no topology here either. The most prototypical compositional drawing (Cro 4/15 vs. Mex 2/15) included – *a shoe scenario + arrows towards in + break*. *Break* was usually demonstrated by *arrows going out of the shoe*. Lexical drawings (Cro 4/15 vs. Mex 4/15) included – *clothes breaking*.

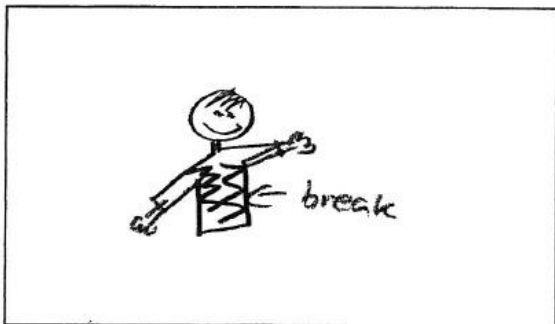
In the rest of the answers both groups showed more tendencies towards visual paraphrases (Cro 7/15 vs. Mex 9/15). Those usually included different *clothes* and *before* and *after scenarios*.

Here are the examples of all the categories we had:

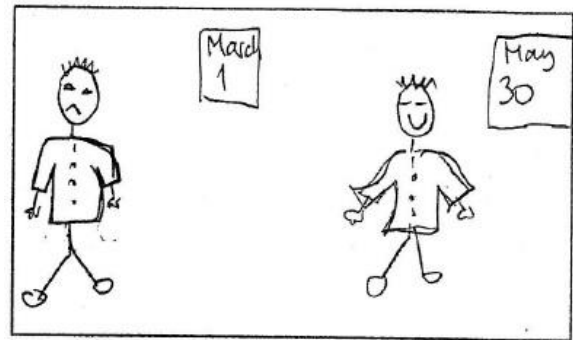
2) CMP



3) LEX



4) PPH



### 2.3.1.2.3.2 *break in* ('get somebody accustomed to something new')

There were **30/30** verbal answers and pictorial representations of the particle verb *break in* and its meaning 'get somebody accustomed to something new'.

In **the verbal answers**, among **the Croats** there was **3** topological answers, **8** compositional answers, **3** lexical answers, and **1** paraphrase. **The Mexicans** gave **3** topological answers, **6** compositional answers, **3** lexical answers, **2** paraphrases, and **1** misinterpretation.

There were 6 topological answers about *break in* in this meaning (Cro 3/15 vs. Mex 3/15). They included – *break + into somebody's routine* or *introduce somebody + into a new situation*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 6/15). The most prototypical compositional answer included – *break something* and then *bring something new in* or *break something* and *go into something new*. Lexical content (Cro 3/15 vs. Mex 3/15) included – *break + old habits*. Paraphrases (Cro 1/15 vs. Mex 2/15) were about – *something new*.

Here are the examples of all the categories we had:

- 1) TOP – “to break into someone’s routine and show or teach him something new, to break into his way of function, thinking”

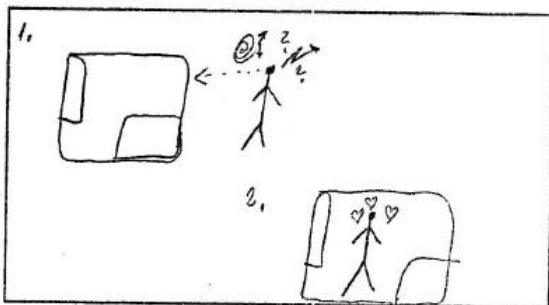
- 2) CMP – “‘break’ – tame somebody, put him/her under your influence and control, make somebody do what you want, ‘in’ involved in this new activity or situation, inside a smaller, closed group”
- 3) LEX – “when somebody puts up certain barriers that one day are overcome or broken down, and once all obstacles are removed there is no opposition anymore”
- 4) PPH – “to break in means to teach someone new skills which they must perform”
- 5) MIS – “loosen a smaller size of cloth”

In the pictorial representations, the Croats drew 2 topological drawings, 6 compositional drawings, 1 lexical drawing, and 6 visual paraphrases. The Mexicans drew 0 topological drawings, 4 compositional drawings, 3 lexical drawings, and 8 visual paraphrases.

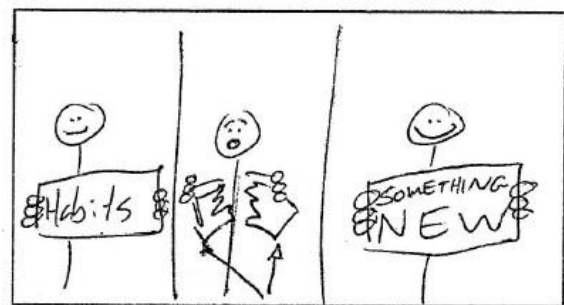
There were topological drawings only among the Croats (Cro 2/15). They included – *somebody going into a new situation* and *something new going into your routine*. Compositional drawings (Cro 6/15 vs. Mex 4/15) included – *a person + break into a new situation*. Break was either written on the arrow (direction) or it was demonstrated by a zig zag line. In the rest of the answers, both groups showed tendencies towards visual paraphrases (Cro 6/15 vs. Mex 8/15). They included – *getting accustomed to something new*. The lexical content (Cro 1/15 vs. Mex 3/15) was demonstrated by – *something breaking*.

Here are the examples of all the categories we had:

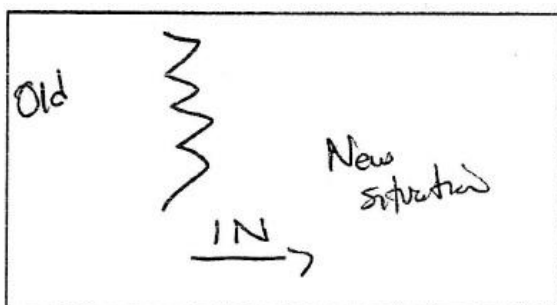
1) TOP



3) LEX



2) CMP



4) PPH



### 2.3.1.2.3.3 *break in* ('interrupt a conversation')

There were **30/30** verbal answers and pictorial representations of the particle verb *break in* and its meaning 'interrupt a conversation'.

In **the verbal answers**, among **the Croats** there was **0** topological, **13** compositional, and **2** paraphrases. **The Mexicans** gave **1** topological answer, **8** compositional, **4** lexical answers, **1** paraphrase, and **1** misinterpretation.

There was only 1 topological answer about *break in* in this meaning (Mex 1/15). It included – *break + into + a conversation*. Most answers in both groups were compositional (Cro 13/15 vs. Mex 8/15). They included – *break a conversation + put yourself in it*. There were lexical answers only among the Mexicans (Mex 4/15). They included – *breaking a conversation*. Some participants used synonyms for *break* like – *tear, shatter, rupture* or *destroy*. It was interesting to see that the participants described the conversation as – *a line, a stream, a space, a circle, a continuum/continuity*, or a *flow*. One participant described it as *a pile of wood* that you have to *break* after going *in*. It was easier to describe *break* if there was something *physical* to break and it was easier to describe *in* if there was *a sphere* to go *into*.

Here are the examples of all the categories we had:

- 1) TOP – “to break into a conversation circle and interrupt it”
- 2) CMP – “‘in’ – to get into the conversation, ‘break’ – points to the negativeness [sic] of the meaning, the rudeness, doing something wrong – breaking the conversation”
- 3) LEX – “break the continuity of a conversation that has already started”
- 4) PPH – “if you break in, you stop somebody from talking either by saying something yourself or by approaching them”
- 5) MIS – “get over obstacles to reach something suddenly”

In **the pictorial representations**, **the Croats** drew **1** topological drawing, **8** compositional drawings, **1** lexical drawing, and **5** visual paraphrases. **The Mexicans** drew **1** topological drawing, **2** compositional drawings, **3** lexical drawings, and **9** visual paraphrases.

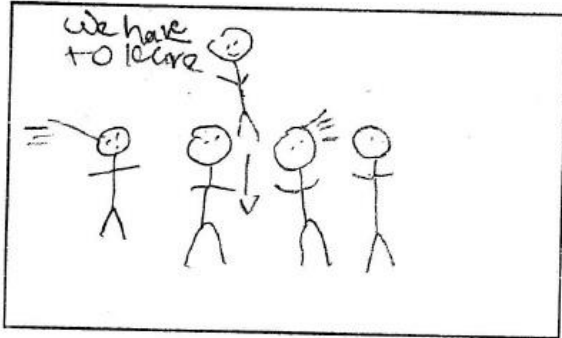
There were only two topological drawings about *break in* in this meaning (Cro 1/15 vs. Mex 1/15). They included – *a person going into a conversation between 2 people*. Compositional answers (Cro 8/15 vs. Mex 2/15) included – *break + into a conversation between 2 people*. *Break* was either written somewhere or it was marked by an *X* or something similar at the point of entry of the arrow (*in*).

Unlike in the verbal answers, where most answers of both groups were compositional, here the Croats showed tendencies towards compositionality, while the Mexicans showed

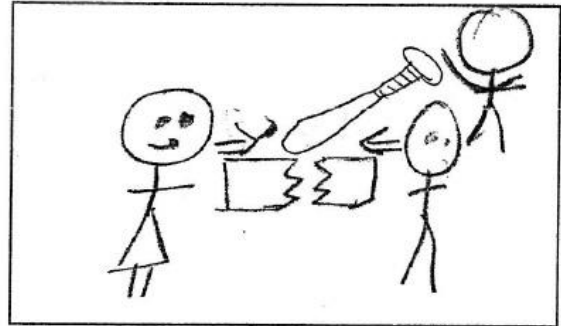
more tendencies towards lexical determination (Cro 1/15 vs. Mex 3/15) and visual paraphrases (Cro 5/15 vs. Mex 9/15). Lexical content was demonstrated by – *a person breaking the conversation*. Visual paraphrases included – *conversation scenarios*.

Here are the examples of all the categories we had:

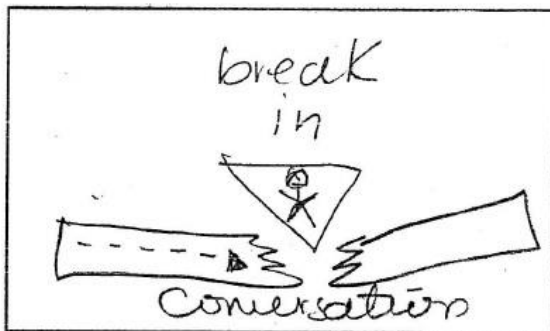
1) TOP



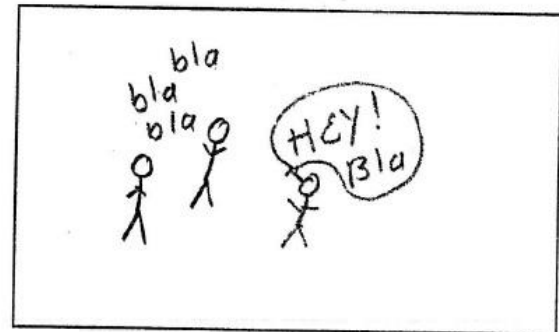
3) LEX



2) CMP



4) PPH



#### 2.3.1.2.3.4 *break out* ('become covered in something, like in sweat or rash')

There were **30/30** verbal answers and **29/30** pictorial representations of the particle verb *break out* and its meaning 'become covered in something, like in sweat or rash'.

In the verbal answers, among the Croats there was **3** topological answers, **10** compositional answers, **1** lexical answer, and **1** paraphrase. The Mexicans gave **2** topological answers, **7** compositional answers, **1** lexical answer, **4** paraphrases, and **1** misinterpretation.

There was more topology among the Croats (Cro 3/15) than among the Mexicans (Mex 2/15). The most prototypical topological answer included – *something/sweat/rash + break + out of your skin* or *something/sweat/rash + go out of your skin*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 10/15 vs. Mex 7/15). Compositional answers included – *break + the skin and then go/come out*. It was interesting to see that 4 Croats assigned the following meaning to the particle *out* –



*make/become visible*. Lexical answers (Cro 1/15 vs. Mex 1/15) included *something breaking*, and paraphrases included – *sweat* or *rash*.

Here are the examples of all the categories we had:

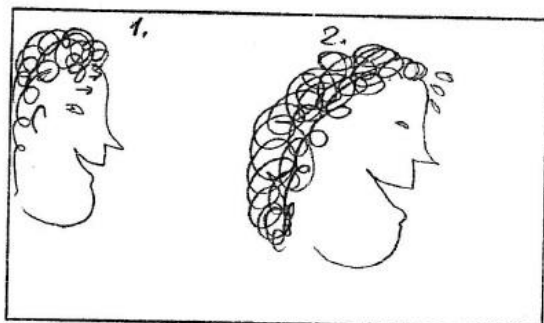
- 1) TOP – “you have a certain disease or problem that is inside of you but then it suddenly breaks out – manifests itself on your body as well”
- 2) CMP – “if we imagine sweat being a live entity then we can say it is breaking the skin in order to get out”
- 3) LEX – “when your body sweats, your cells are breaking”
- 4) PPH – “to have some kind of liquid veil over the body”
- 5) MIS – “when some kind of virus infects a huge amount of people”

In **the pictorial representations**, the Croats drew **3** topological drawings, **3** compositional drawings, **1** lexical drawing, and **8** visual paraphrases. **The Mexicans** drew **0** topological drawings, **4** compositional drawings, **1** lexical drawing, **8** visual paraphrases, **1** misinterpretation and **1** no picture.

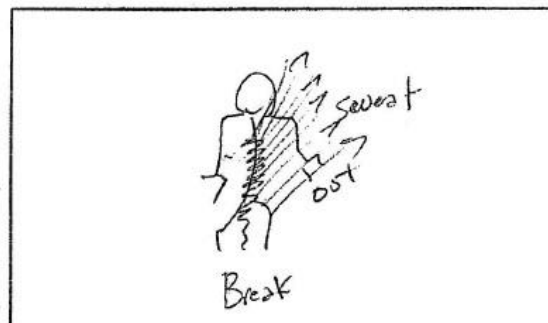
There was topology only among the Croats (Cro 3/15). Topological drawings included – *sweat/something going out of the skin*. Compositional drawings (Cro 3/15 vs. Mex 4/14) included *break + the skin* and *then come out*. *Break* was usually written somewhere, or it was visible, e.g. *drops of sweat holding a hammer*. Lexical drawings (Cro 1/15 vs. Mex 1/14) included *skin/something breaking*. Unlike in the verbal answers, where the answers were mostly topological or compositional, here both groups showed more tendencies towards the visual paraphrases (Cro 8/15 vs. Mex 8/14). Visual paraphrases usually included – *a face/body covered in rash/sweat*.

Here are the examples of all the categories we had:

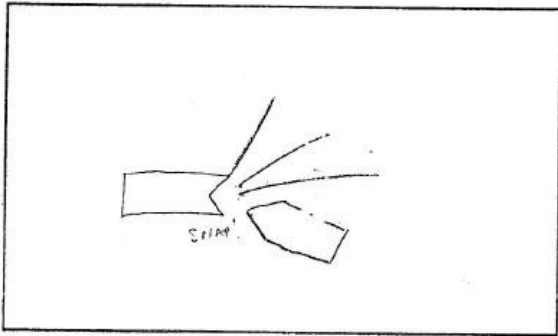
1) TOP



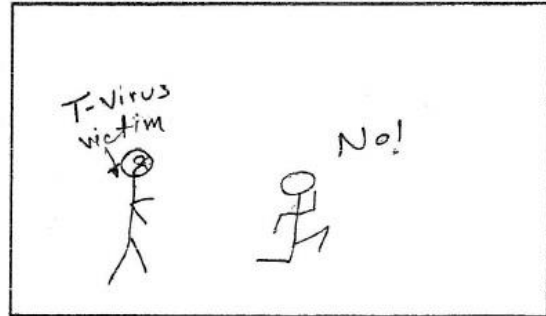
2) CMP



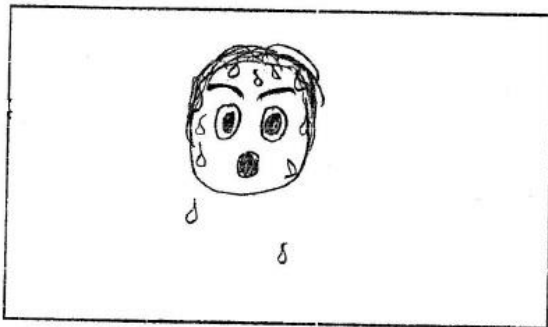
3) LEX



5) MIS



4) PPH



#### 2.3.1.2.3.5 *break out* ('begin suddenly')

There were **30/30** verbal answers and **29/30** pictorial representations of the particle verb *break out* and its meaning 'begin suddenly'.

In **the verbal answers**, among **the Croats** there was **2** topological answers, **10** compositional answers, and **3** paraphrases. **The Mexicans** gave **1** topological answer, **5** compositional answers, **5** lexical answers, and **4** paraphrases.

There were 3 topological answers about *break out* in this meaning (Cro 2/15 vs. Mex 1/15). They included – *break + out from something/somewhere*. The Croats showed more tendencies towards compositionality (Cro 10/15), and the Mexicans showed equal tendencies towards compositionality (Mex 5/15) and lexical determination (Mex 5/15). Compositional answers included – *break something + to get/come out of somewhere*. For *break*, they used synonyms – *destroy* and *tear*. Lexical answers included – *break an activity*. It was interesting to see that 4 Croats assigned the following meanings to the particle *out* – *visible, public, accessible, free*. Paraphrases (Cro 3/15 vs. Mex 4/15) included – 'begin suddenly'.

Here are the examples of all the categories we had:

- 1) TOP – “break out from any routine and suddenly begin doing something”
- 2) CMP – “something is confined to a particular place and then it suddenly breaks its bounds and comes out and starts a particular activity”

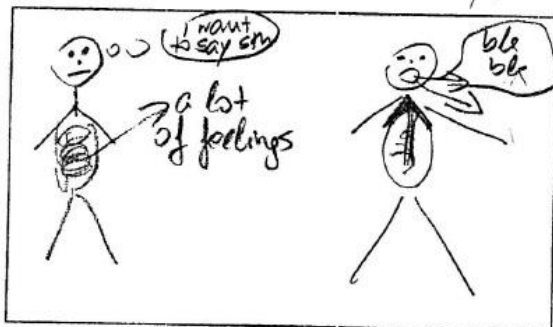
- 3) LEX – “you break a period of doing nothing”
- 4) PPH – “when a dreadful event takes place unexpectedly”
- 5) MIS – /

In the pictorial representations, the Croats drew 1 topological drawing, 7 compositional drawings, 1 lexical drawing, and 6 visual paraphrases. The Mexicans drew 0 topological drawings, 2 compositional drawings, 5 lexical drawings, 7 visual paraphrases, and 1 no picture.

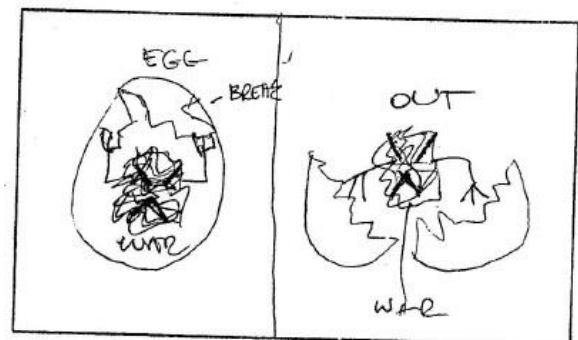
There was only 1 topological drawing (Cro 1/15). It included – *emotions going out of a person (speech bubble + direction)*. Compositional drawings were more typical for the Croats (Cro 7/15 vs. Mex 2/14) and they included – *break + something going out of something*. Break was either written somewhere or it was visible in *something breaking* and sometimes that included – *zig zag lines*. In one case, there was a *war metaphor*. Lexical determination was more typical for the Mexicans (Cro 1/15 vs. Mex 5/14). Lexical drawings included – *breaking something in two pieces*. Unlike in the verbal answers, here there were many visual paraphrases (Cro 6/15 vs. Mex 7/15). They included – *activity + begin suddenly*, e.g. *a radio playing, a track and field race, a war*, and in one case – *a face covered in rash* like in the previous meaning of *break out* we had.

Here are the examples of all the categories we had:

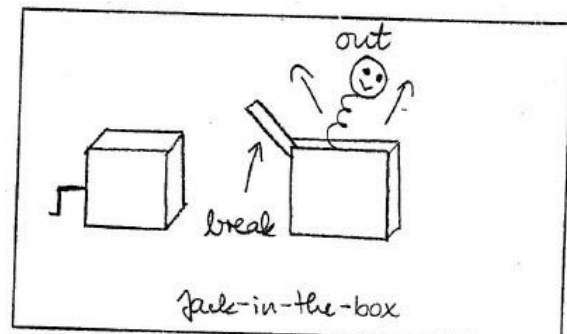
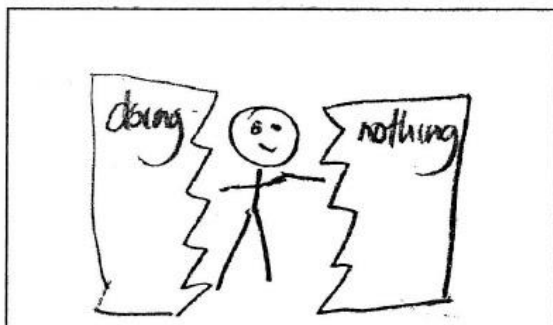
1) TOP



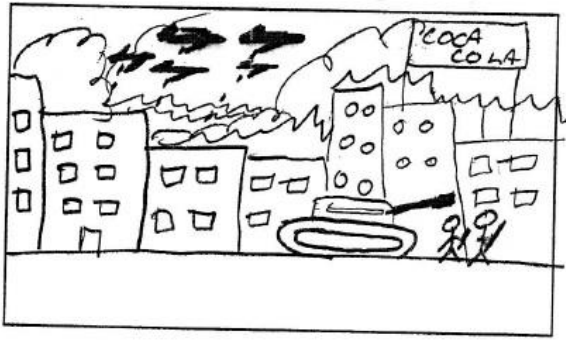
2) CMP & CMP 2



3) LEX



#### 4) PPH



#### 2.3.1.2.3.6 *break out* ('escape')

There were **30/30** verbal answers and pictorial representations of the particle verb *break out* and its meaning 'escape'.

In the verbal answers, among the Croats there was **0** topological, **12** compositional answers, and **3** paraphrases. The Mexicans gave **1** topological answer, **4** compositional answers, **6** lexical answers, and **4** paraphrases.

There was only 1 topological answer about *break out* in this meaning (Mex 1/15). It included – *break + out + from a room*. Compositional answers (Cro 12/15 vs. Mex 4/15) included – *break + the door/window/barrier/restraints + go/come out (of/from a place)*. It was interesting to see that 2 Croats assigned the following meanings to the particle *out* – *freedom* and *displaced*. In the rest of the answers, the Mexicans showed more tendencies towards lexical determination (Cro 0/15 vs. Mex 6/15). Lexical answers included – *break the window/wall/obstacles/lock*. Paraphrases were about 'escape'.

Here are the examples of all the categories we had:

- 1) TOP – “when you escape and you stop being shut up, you break out from that room or space”
- 2) CMP – “if you are captured in a house, you break the door and get out”
- 3) LEX – “I imagine a prisoner kicking the walls of a prison and breaking them”
- 4) PPH – “if somebody breaks out, they go through limits set for them and run away”
- 5) MIS – /

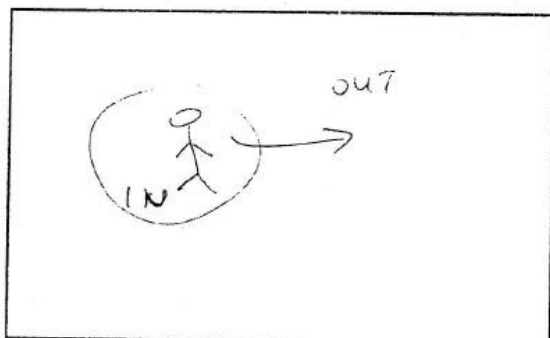
In the pictorial representations, the Croats drew **2** topological drawings, **8** compositional drawings, **1** lexical drawing, and **4** visual paraphrases. The Mexicans drew **0** topological drawings, **2** compositional drawings, **4** lexical drawings, and **9** visual paraphrases.

There were only 2 topological drawings (Cro 2/15) and they included – *a person going out of a container (arrow towards – out)* and – *a person going out of a prison (arrow towards – out)*. Compositional drawings (Cro 8/15 vs. Mex 2/15) included – *a person and/or an arrow*

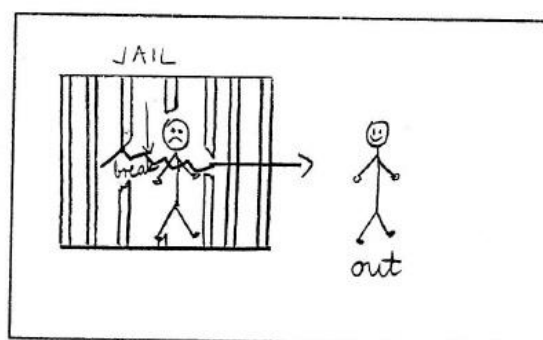
going out of + a broken window/door/prison/containment. Sometimes *break* was written somewhere and/or there were zig zag lines. There was clear direction – arrow towards out. Lexical drawings (Cro 1/15 vs. Mex 4/15) included – *break* + *chain/wall/lock/window*. Visual paraphrases (Cro 4/15 vs. Mex 9/15) included – *escape* + *prison*.

Here are the examples of all the categories we had:

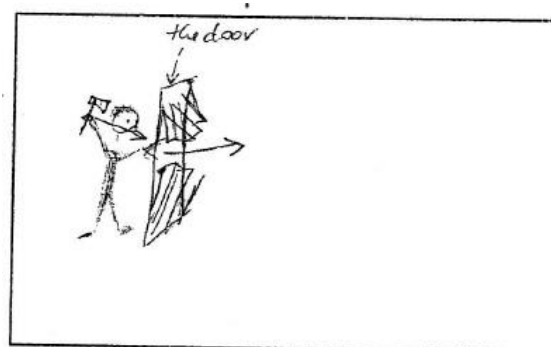
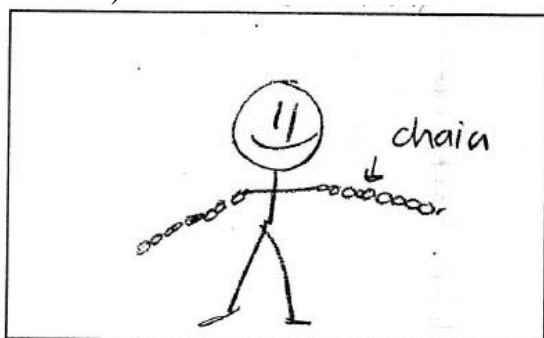
1) TOP



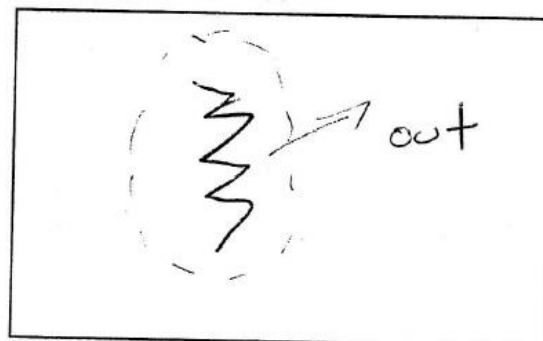
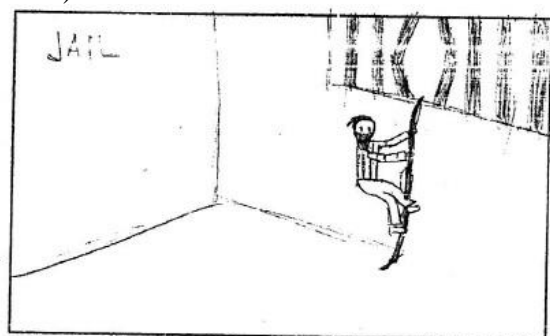
2) CMP 1 & 2 & 3



3) LEX



4) PPH



### 2.3.1.2.3.7 Discussion and Conclusions: *break in* and *break out*

In conclusion, in the verbal answers for *break in* and all its meanings (‘wear something until it is comfortable’; ‘get somebody accustomed to something new’; ‘interrupt a conversation’), topology occurred most with the second meaning. Compositionality occurred more among the Croats, while lexical determination occurred among both groups, but more so among the Mexicans. Misinterpretations occurred more among the Mexicans (Table 25).

Table 25. Results of the verbal answers for the PV break in

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>BREAK IN</b> ('wear something until it is comfortable')	-	9	3	2	1	-	-	4	6	3	2	-
<b>BREAK IN</b> ('get something accustomed to something new')	3	8	3	1	-	-	3	6	3	2	1	-
<b>BREAK IN</b> ('interrupt a conversation')	-	13	-	2	-	-	1	8	4	1	1	-

In the verbal answer for *break out* and all its meaning ('become covered in something, like in sweat or rash'; 'begin suddenly'; 'escape'), there was some topology among both groups. Compositionality occurred significantly more among the Croats. Lexical determination occurred significantly more among the Mexicans (Table 26). Some participants assigned the following meanings to the particle *out* – *accessible, displaced, free, freedom, make/become visible, public*. This occurred only among the Croats.

Table 26. Results of the verbal answers for the PV break out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>BREAK OUT</b> ('become covered in something, like in sweat or rash')	3	10	1	1	-	-	2	7	1	4	1	-
<b>BREAK OUT</b> ('begin suddenly')	2	10	-	3	-	-	1	5	5	4	-	-
<b>BREAK OUT</b> ('escape')	-	12	-	3	-	-	1	4	6	4	-	-

However, in the pictorial representations of *break in* and all its meanings ('wear something until it is comfortable'; 'get somebody accustomed to something new'; 'interrupt a conversation'), there was some topology and almost only among the Croats (Table 27). Compositionality occurred more among the Croats, while lexical determination occurred among both groups, but more so among the Mexicans. There were many visual paraphrases, especially among the Mexicans.

Table 27. Results of the pictorial representations of the PV break in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>BREAK IN</b> ('wear something until it is comfortable')	-	4	4	7	-	-	-	2	4	9	-	-
<b>BREAK IN</b> ('get something accustomed to something new')	2	6	1	6	-	-	-	4	3	8	-	-
<b>BREAK IN</b> ('interrupt a conversation')	1	8	1	5	-	-	1	2	3	9	-	-

In the drawings of *break out* and all its meanings ('become covered in something, like in sweat or rash'; 'begin suddenly'; 'escape'), there was topology only among the Croats. Compositionality occurred more among the Croats. Lexical determination was more typical for the Mexicans. There were many visual paraphrases among both groups (Table 28).

Table 28. Results of the pictorial representations of the PV break out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>BREAK OUT</b> ('become covered in something, like in sweat or rash')	3	3	1	8	-	-	-	4	1	8	1	1
<b>BREAK OUT</b> ('begin suddenly')	1	7	1	6	-	-	-	2	5	7	-	1
<b>BREAK OUT</b> ('escape')	2	8	1	4	-	-	-	2	4	9	-	-

#### 2.3.1.2.4 draw in and draw out

In the next section we analyse the verbal answers and pictorial representations of the PVs *draw in* and *draw out* and their meanings. Overall there were 90 verbal answers and 90 pictorial representations.

There were 30 verbal answers and 30 pictorial representations of *draw in*. We analysed the following meaning:

- 1) 'become dark earlier as winter approaches'.

There were 60 verbal answers and 60 pictorial representations of *draw out*. We analysed the following meanings:

- 1) ‘make something last longer’;
- 2) ‘make somebody feel less nervous or shy’.

#### 2.3.1.2.4.1 *draw in* (‘become dark earlier as winter approaches’)

There were **30/30** verbal answers and pictorial representations of the particle verb *draw in* and its meaning ‘become dark earlier as winter approaches’.

In **the verbal answers**, among **the Croats** there were **3** topological, **7** compositional answers, **1** lexical answer, **2** paraphrases, and **2** misinterpretations. **The Mexicans** gave **3** topological answers, **4** compositional answers, **4** lexical answers, and **4** paraphrases.

There were 6 topological answers about *draw in* in this meaning (Cro 3/15 vs. Mex 3/15). Those answers included different scenarios – *draw + the sun + into the horizon* or *draw + dark + into the light*. Compositional answers (Cro 7/15 vs. Mex 4/15) included – *draw/pull/take/attract + dark/light* and *into a place/into something/into darkness*. There were different metaphors. The most compelling metaphors included explaining *draw* in its first meaning and incorporating the particle in different ways. Either the sun *draws* its path *inside of the earth* or *the colour is colouring the earth* and *(drawing) entering (in) the space that was previously untouched by it*. This occurred only among the Mexicans (3/4 CMP). Another metaphor worth mentioning included – *pull the dark into the house* (Cro 1/7 CMP). It was easier to imagine *a house* as a container and *a person pulling the dark inside*. It was interesting to see that 1 Croat assigned the following meanings to the particle *in* – *closed*, *hidden* and *dark*. In the rest of the answers, the Mexicans showed more tendencies towards lexical determination (Cro 1/15 vs. 4/15). Those answers included – *(winter) + pull + the night/sun/light* or simply *paint*, *sketch* or *colour*. Paraphrases (Cro 2/15 vs. Mex 4/15) included – *become darker as winter approaches*. Misinterpretations (Cro 2/15) included – *darkness drawing people into their houses as it becomes dark and cold*.

Here are the examples of all the categories we had:

- 1) TOP – “the dark is drawn into where light should be”
- 2) CMP – “the day is taken (drawn) into darkness”// “the sun is getting inside, it draws a path with its movement to the inside of the earth”
- 3) LEX – “the word draw makes me think of the sun being pulled by something so that darkness can come”// “draw is like sketch but with a pencil so it is dark”
- 4) PPH – “when it draws in it means the day shortens itself and the night begins earlier and lasts longer”



- 5) MIS – “people go ‘in’ inside of their houses when it gets dark, the darkness draws them ‘in’; ‘in’ is more appealing than outside when it gets dark”

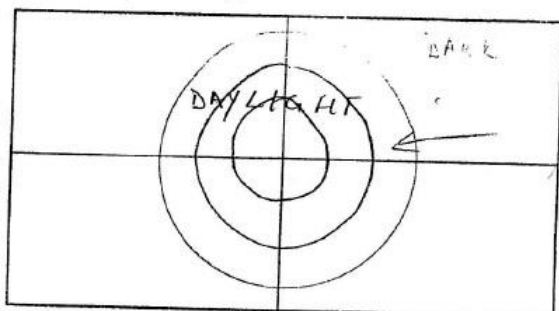
In the pictorial representations, the Croats drew 3 topological drawings, 3 compositional drawings, 1 lexical drawing, 7 paraphrases and 1 misinterpretation. The Mexicans drew 1 topological drawing, 0 compositional drawings, 4 lexical drawings, and 10 visual paraphrases.

There were 4 topological drawings about *draw in* in this meaning (Cro 3/15 vs. Mex 1/15). They included – *dark going into the daylight; daylight going into the dark; the sun going into the horizon* and *a container + arrows towards – in*. There were compositional drawings only among the Croats (Cro 3/15). They included – *a person + draw/put + the sun + into a bag; a person + pull (imaginative) + dark + into the house through a window* and *winter (personified) + draw + the sun + into the horizon*. Lexical drawings (Cro 1/15 vs. Mex 4/15) included – *a person + draw + night; draw/pull + the sun; winter (personified) + draw/pull + the night/the sun; and paint (draw) (Mex 1/4 LEX)*.

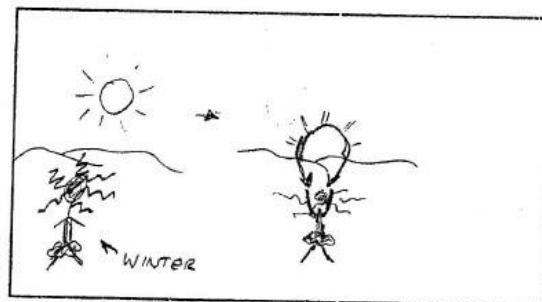
Unlike in the verbal answers, where the Croats showed more tendencies towards compositionality and the Mexicans towards lexical determination, here most drawings of both groups were visual paraphrases (Cro 7/15 vs. Mex 10/15). They included – *sun setting, become darker earlier, and winter*. The one misinterpretation we had (Cro 1/15) included – *a person drawn into the house because it’s night time*.

Here are the examples of all the categories we had:

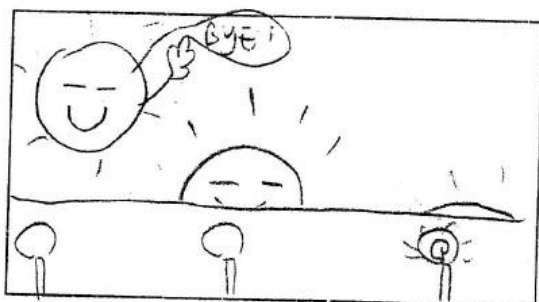
1) TOP



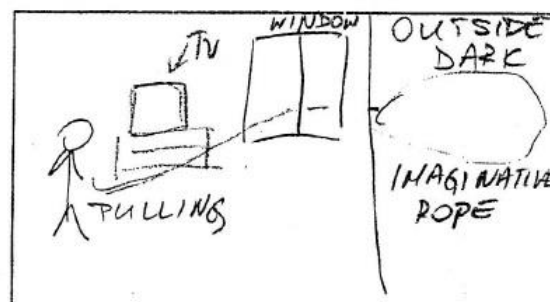
2) CMP 1



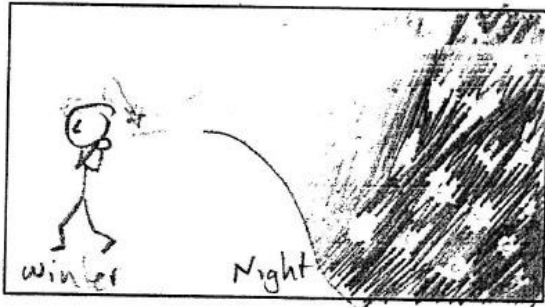
4) PPH



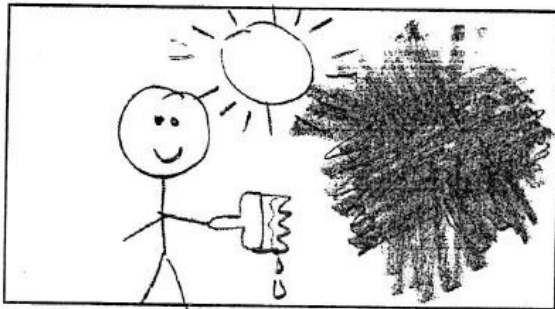
CMP 2



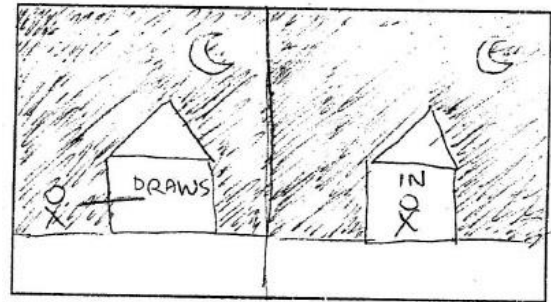
3) LEX



LEX 2



5) MIS



2.3.1.2.4.2 *draw out* ('make something last longer')

There were **30/30** verbal answers and pictorial representations of the particle verb *draw out* and its meaning 'make something last longer'.

In **the verbal answers**, among **the Croats** there were **2** topological answers, **8** compositional answers, **3** paraphrases and **2** misinterpretations. **The Mexicans** gave **2** topological answers, **9** compositional answers, **1** lexical answer, **2** paraphrases and **1** misinterpretation.

There were 4 topological answers about *draw in* in this meaning (Cro 2/15 vs. Mex 2/15). They included – *draw + something + out of its limit*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 8/15 vs. Mex 9/15). The most prototypical compositional answer included – *draw/pull/take/stretch + something and out of something* (e.g. *time* or *limit*) or *draw a line + outside of the established limits*. The latter occurred only among the Mexicans (Mex 4/9 CMP). It was interesting to see that 3 Croats and 1 Mexican assigned the following meanings to the particle *out* – *stretch* or *longer time*. Paraphrases included – 'make something last longer'.

Here are the examples of all the categories we had:

- 1) TOP – "something lasts longer as it is drawn out of its limits"
- 2) CMP – "we could picture drawing, i.e. pulling a rope out of a bundle, thus making it longer; 'out' would imply direction, 'draw' action, both which aren't finite and somehow stretch" // 'if you draw a line within the established limits, it will last the

expected; but if you draw this line outside of the established limits, you can draw it longer, as much as your will permits you”

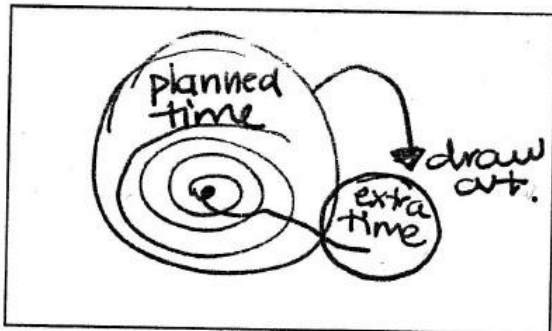
- 3) LEX – “pull/draw the time of something as to stretch such time
- 4) PPH – “when you need something to be longer in terms of time”
- 5) MIS – “use something heavily until it becomes useless”

In the pictorial representations, the Croats drew 0 topological drawings, 4 compositional drawings, 3 lexical drawings, 6 visual paraphrases, and 2 misinterpretations. The Mexicans drew 0 topological drawings, 8 compositional drawings, 1 lexical drawing, 5 visual paraphrases, and 1 misinterpretation.

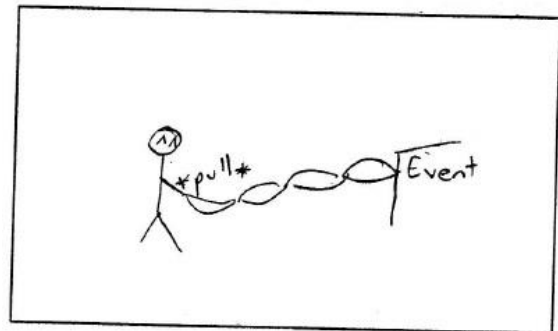
There was no topology about *draw in* in this meaning. Compositionality was more typical for the Mexicans (Cro 4/15 vs. Mex 8/15). The drawings included – a person + draw/pull + something + out of something (box, container) or draw lines outside of the paper limits (Mex 4/8 CMP). Lexical drawings included – draw something (Cro 3/15 vs. Mex 1/15). In one case *draw* was *paint* (Cro 1/3 LEX) and in the rest of the lexical answers it was *draw* as *pull*. In the rest of the drawings, both groups showed more tendencies towards visual paraphrases (Cro 6/15 vs. Mex 5/15). Visual paraphrases usually included *time scenarios* – something lasting longer than it should.

Here are the examples of all the categories we had:

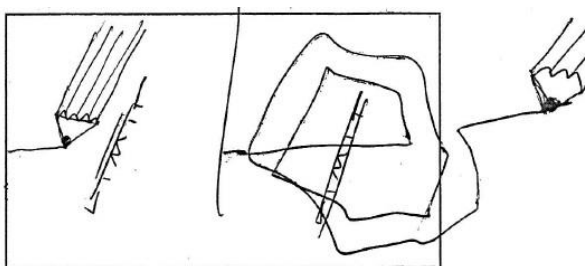
2) CMP 1



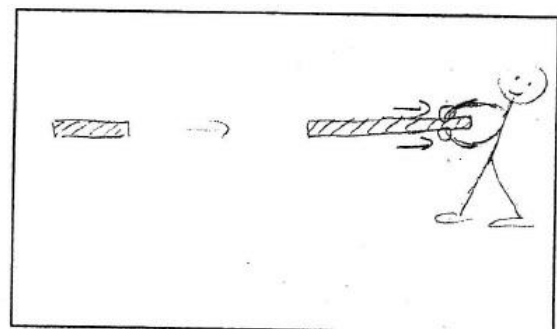
CMP 3



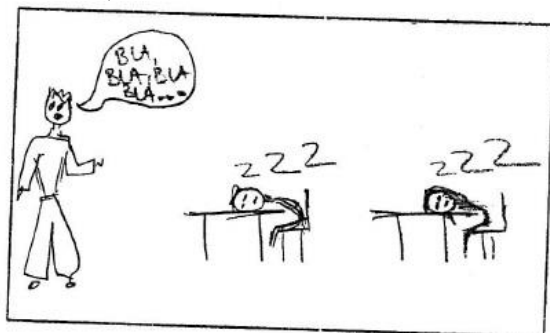
CMP 2



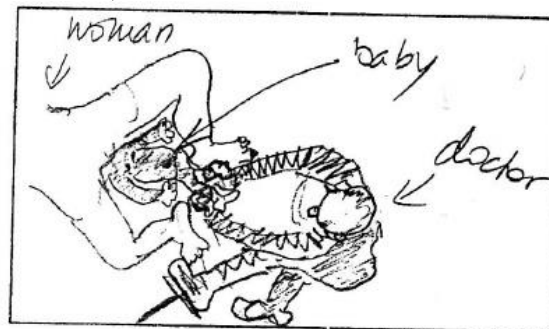
3) LEX



4) PPH



5) MIS



#### 2.3.1.2.4.3 *draw out* ('make somebody feel less nervous or shy')

There were **30/30** verbal answers and pictorial representations of the particle verb *draw out* and its meaning 'make somebody feel less nervous or shy'.

In the verbal answers, among the Croats there were **4** topological answers, **10** compositional answers, and **1** misinterpretation. The Mexicans gave **1** topological answer, **11** compositional, **1** lexical answer, and **2** paraphrases.

There were more topological answers about *draw out* in this meaning among the Croats (Cro 4/15) than among the Mexicans (Mex 1/15). They included – *draw + somebody + out of nervousness* (Cro 2/4 TOP) or *reverse viewing – draw + nervousness/shyness + out of somebody* (Cro 1/4 TOP vs. Mex 1/1 TOP). In one case (Cro 1/4 TOP) there was both. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 10/15 vs. Mex 11/15). The most prototypical compositional answer included – *draw + somebody and out of nervousness/shyness/their shell* (Cro 6/10 CMP vs. Mex 7/11 CMP) or less frequently – *reverse viewing – draw + nervousness/shyness and out of somebody* (Cro 4/10 CMP vs. Mex 3/11 CMP). For *draw*, they used synonyms like – *pull, drag, drive, take, extract, and lure*. In one case, the participant explained that “you can visualice [sic] someone in a better way which is why you draw outside that person a developed version of him in order to show that that person can be confident”. This was a very symbolic answer and it included *draw* in its first meaning but *out* was also explained. It was categorized as a compositional answer (Mex 1/11 CMP). It was interesting to see that 2 Croats assigned the following meaning to the particle *out* – *visible* and *public*.

Here are the examples of all the categories we had:

- 1) TOP – “you draw somebody out of their nervousness or draw the nervousness out of them”
- 2) CMP – “we can see this meaning as someone drawing (luring) someone else ‘out’ of its shell (shyness, nervousness) and therefore diminishing that”// “you are

nervous and somebody finds a way to pull (draw) that feeling out of you so you don't feel so nervous anymore"

- 3) LEX – “to make a drawing of confidence for someone”
- 4) PPH – “try to break the ice, finish tension”
- 5) MIS – “‘In’ has the idea of being safe and confident, out in the open you don't know what to expect and you feel nervous and shy”

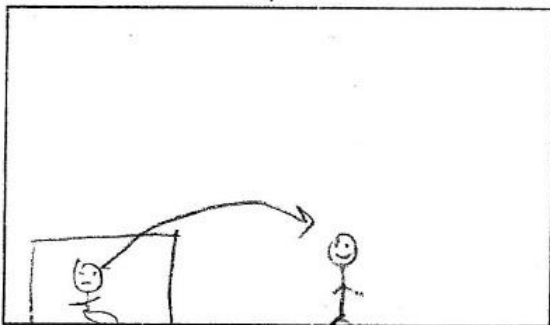
In the pictorial representations, the Croats drew 1 topological drawing, 6 compositional drawings, 7 visual paraphrases, and 1 misinterpretation. The Mexicans drew 0 topological drawings, 6 compositional drawings, 2 lexical drawings, and 7 visual paraphrases.

There was only 1 topological drawing about *draw out* in this meaning (Cro 1/15). It included *a person going out of a container*. The most prototypical compositional drawing (Cro 6/15 vs Mex 6/15) included – *a person + draw + somebody + out of shyness/nervousness/a container* (Cro 3/6 CMP vs. Mex 5/6 CMP) or less frequently *reverse viewing – draw + nervousness + out of a person* (Cro 2/6 CMP vs. Mex 1/6 CMP).

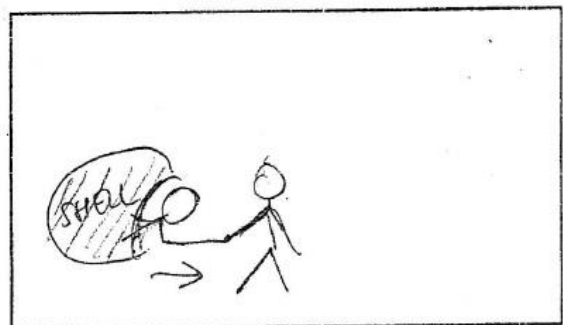
Unlike in the previous drawings of PVs containing *draw*, where only the Mexicans drew lines outside of the paper limits, here 1 Croat drew a container of nervousness and lines going out of it (Cro 1/6 CMP). Lexical drawings (Mex 2/15) included – *draw* in its first meaning, e.g. *draw confidence on a piece of paper*. Unlike in the verbal answers, here both groups showed more tendencies towards compositionality and visual paraphrases (Cro 7/15 vs. Mex 7/15). Visual paraphrases usually included *people scenarios – a person making somebody feel less nervous*.

Here are the examples of all the categories we had:

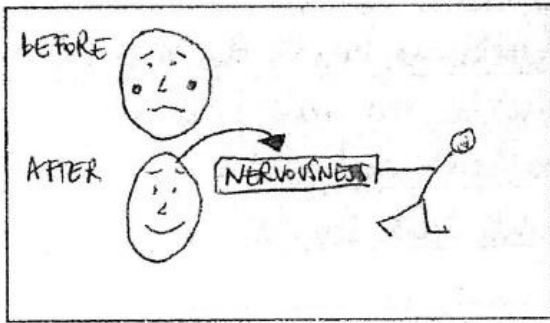
1) TOP



2) CMP



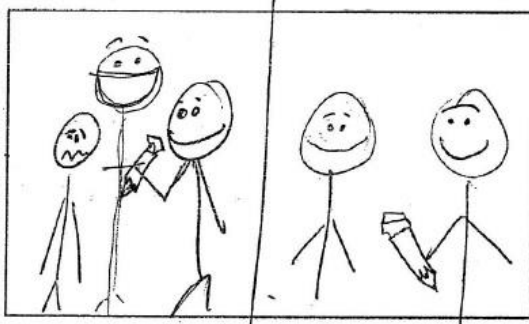
CMP – R



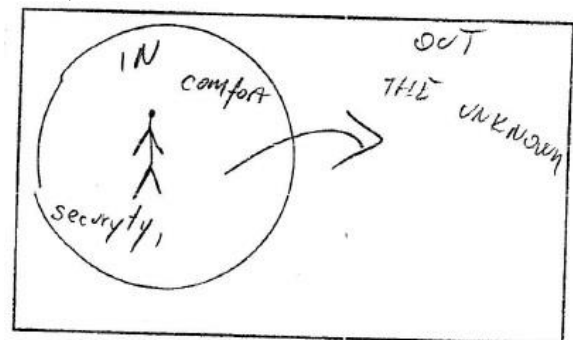
4) PPH



3) LEX



5) MIS



#### 2.3.1.2.4.4 Discussion and Conclusions: *draw in* and *draw out*

In conclusion, in the verbal answers for *draw in* ('become dark earlier as winter approaches') and *draw out* and all its meanings ('make something last longer'; 'make somebody feel less nervous or shy'), there was topology among both groups (Table 29; Table 30), but with *draw out* ('make somebody feel less nervous or shy') it occurred more among the Croats. In the rest of the answers both groups showed tendencies towards compositionality. It was interesting to see that only the Mexicans showed tendencies towards explaining *draw* in its first meaning, e.g. *draw lines/colour*. Lexical determination occurred more among the Mexicans but more so with *draw in*. Misinterpretations occurred more among the Croats. Both groups showed tendencies towards *reverse viewing* with *draw out* ('make somebody feel less nervous or shy') in their topological and compositional answers, but more in the latter. In one case, the particle *in* was assigned the following meanings – *closed, hidden, dark*. Some participants assigned the following meanings to the particle *out* – *stretch or longer time* and *visible and public*.

Table 29. Results of the verbal answers for the PV draw in

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>DRAW IN</b> (‘become dark earlier as winter approaches’)	3	7	1	2	2	-	3	4	4	4	-	-

Table 30. Results of the verbal answers for the PV draw out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>DRAW OUT</b> (‘make something last longer’)	2	8	-	3	2	-	2	9	1	2	1	-
<b>DRAW OUT</b> (‘make somebody feel less nervous or shy’)	4	10	-	-	1	-	1	11	1	2	-	-

However, in the pictorial representations of *draw in* (‘become dark earlier as winter approaches’) and *draw out* and all its meanings (‘make something last longer’; ‘make somebody feel less nervous or shy’), topology occurred more among the Croats and with *draw in* (Table 31). Compositionality in *draw in* occurred only among the Croats but with *draw out* (‘make something last longer’) it was more typical for the Mexicans. With *draw out* (‘make somebody feel less nervous or shy’) it occurred equally (Table 32). It was interesting to see that both groups showed tendencies towards drawing the verb in its first meaning, e.g. *draw lines* but only with *draw out*. It occurred more among the Mexicans. Lexical determination occurred more among the Mexicans with *draw in* and *draw out* (‘make somebody feel less nervous or shy’), but with *draw out* (‘make something last longer’) it was more typical for the Croats. Both groups showed a lot of tendencies towards visual paraphrases. Misinterpretations were more typical for the Croats. With *draw out* (‘make somebody feel less nervous or shy’), both groups showed tendencies towards *reverse viewing* but only in their compositional drawings.

Table 31. Results of the pictorial representations of the PV draw in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>DRAW IN</b> (‘become dark earlier as winter approaches’)	3	3	1	7	1	-	1	-	4	10	-	-

Table 32. Results of the pictorial representations of the PV draw out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
<b>DRAW OUT</b> (‘make something last longer’)	-	4	3	6	2	-	-	8	1	5	1	-
<b>DRAW OUT</b> (‘make somebody feel less nervous or shy’)	1	6	-	7	1	-	-	6	2	7	-	-

### 2.3.1.2.5 pull in and pull out

In the next section we analyse the verbal answers and pictorial representations of the PVs *pull in* and *pull out* and their meanings. Overall there were 89 verbal answers and 89 pictorial representations.

There were 59 verbal answers and 59 pictorial representations of *pull in*. We analysed the following meanings:

- 1) ‘attract people in large numbers’;
- 2) ‘move to the side of the road to stop’.

There were 30 verbal answers and 30 pictorial representations of *pull out*. We analysed the following meaning:

- 1) ‘stop being involved in something’.

#### 2.3.1.2.5.1 pull in (‘attract people in large numbers’)

There were **30/30** verbal answers and pictorial representations of the particle verb *pull in* and its meaning ‘attract people in large numbers’.



In **the verbal answers**, among **the Croats** there was **1** topological answer, **12** compositional answers, **1** lexical answer, and **1** paraphrase. **The Mexicans** gave **1** topological answer, **5** compositional answers, **5** lexical answers, and **4** paraphrases.

There were only 2 topological answers about *pull in* in this meaning (Cro 1/15 vs. Mex 1/15). They included – *pull + people + into your attraction/realm*. Most answers referring to *pull in* were compositional (Cro 12/15 vs. Mex 5/15). The most prototypical compositional answer included – *pull + somebody and into a place*. For *pull*, they used synonyms like – *draw, drag, grab, drive, attract, take, get, and push*. Some participants used *a rope* or *a fishnet analogy* to give us the context for *pull*. Lexical determination was more typical for the Mexicans (Cro 1/15 vs. Mex 5/15). Those drawings included – *pull + people* (e.g. *with smooth words* or *by an invisible rope*). Paraphrases (Cro 1/15 vs. Mex 4/15) included – ‘attract people in large numbers’.

Here are the examples of all the categories we had:

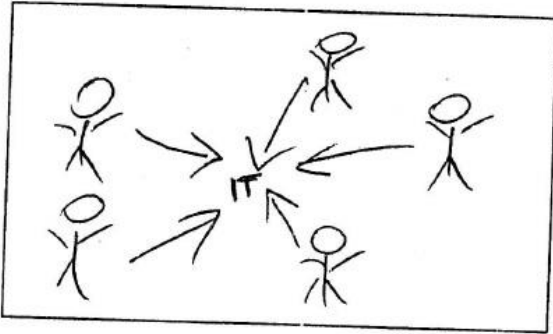
- 1) TOP – “you pull the people into your idea or attraction or opinion”
- 2) CMP – “while literally you grab someone and pull him/her in your house or circle, in a symbolic way it is the same just the force that pulls is invisible”
- 3) LEX – “by attracting a lot of people or gathering them, there’s an image they are being pulled by an invisible rope”
- 4) PPH – “when someone is very good looking and catches the attention of many people”
- 5) MIS – /

In **the pictorial representations**, **the Croats** drew **1** topological drawing, **8** compositional drawings, **4** lexical drawings, and **2** visual paraphrases. **The Mexicans** drew **0** topological drawings, **3** compositional drawings, **8** lexical drawings, and **4** visual paraphrases.

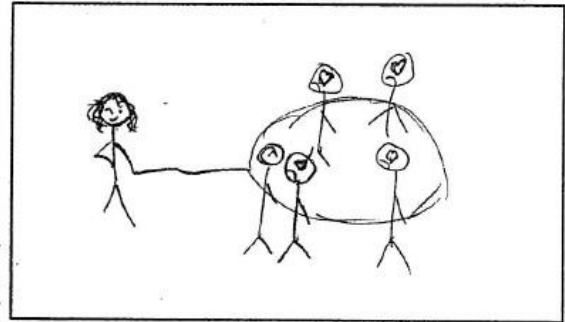
There was only one topological drawing about *pull in* in this meaning (Cro 1/15). It included *a crowd of people going into/towards it (arrow=direction)*. Most of the drawings were compositional (Cro 8/15 vs. Mex 3/15). The most prototypical compositional drawing included – *pull people using a rope + into a house/into you*. There were also drawings that included *call* or *push* as a synonym for *pull*. In the rest of the drawings, both groups showed more tendencies towards lexical determination (Cro 4/15 vs. Mex 8/15). Lexical drawings included – *pull people using a rope* or *a person attracting people by calling them* (e.g. *a megaphone* or *a hand gesture*). The latter was more typical for the Mexicans. In one case, *a person* used *a magnet* to *pull* people + *arrows* denoting the direction of the pulling, but *in* was not visible. Visual paraphrases (Cro 2/15 vs. Mex 4/15) included – *a crowd people*.

Here are the examples of all the categories we had:

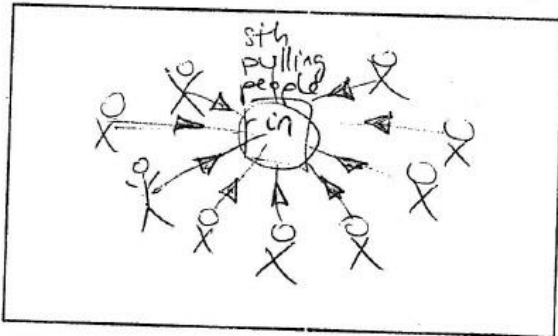
1) TOP



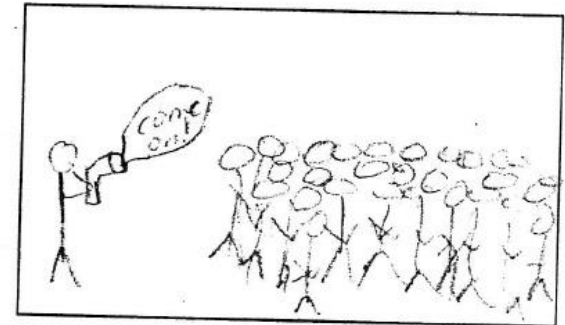
3) LEX



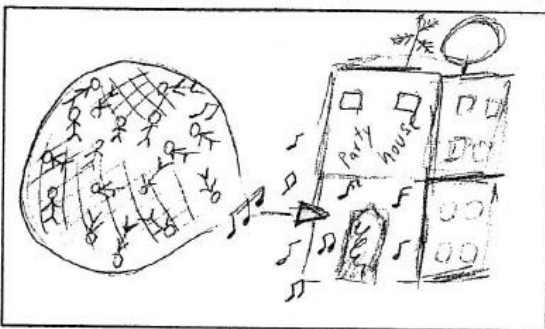
2) CMP



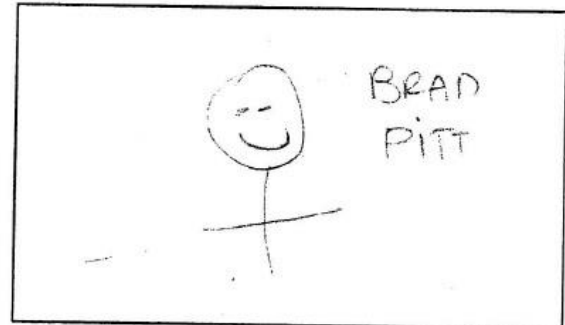
LEX 2



CMP 2



4) PPH



#### 2.3.1.2.5.2 *pull in* ('move to the side of the road to stop')

There were **29/30** verbal answers and pictorial representations of the particle verb *pull in* and its meaning 'move to the side of the road to stop'.

In **the verbal answers**, among **the Croats** there were **5** topological answers, **5** compositional answers, **2** lexical answers, **2** paraphrases, and **1** no text. **The Mexicans** gave **6** topological answers, **1** compositional answer, **3** lexical answers, and **5** paraphrases.

There were more answers referring to topology among the Mexicans (Mex 6/15) than among the Croats (Cro 5/14). The most prototypical topological answer included – *pull + the car/vehicle + in(to) the (out)side/area of the road*. In the rest of the answers, the Croats showed more tendencies towards compositionality (Cro 5/14 vs. Mex 1/15) and the Mexicans

towards the paraphrasing the meaning (Cro 2/14 vs. Mex 5/15). Compositional answers included – *pull the car and into a place*. For *pull*, they used synonyms like – *take* and *transfer*. There were lexical answers among both groups (Cro 2/14 vs. Mex 3/15) and they included – *pulling the handbrake or the steering wheel*, and *pulling your car*. Paraphrases included – *a car on the side of the road*.

Here are the examples of all the categories we had:

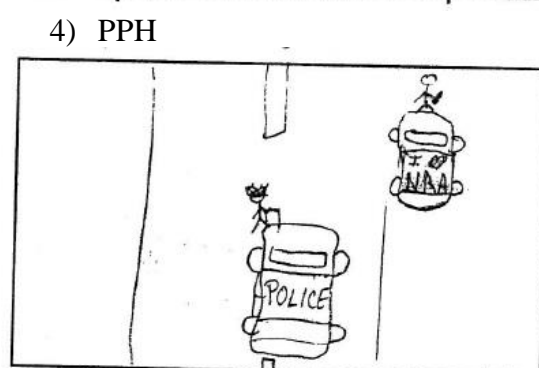
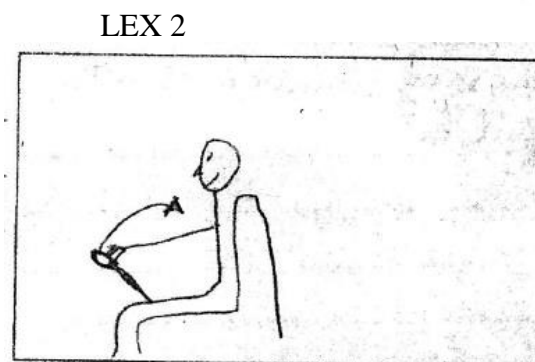
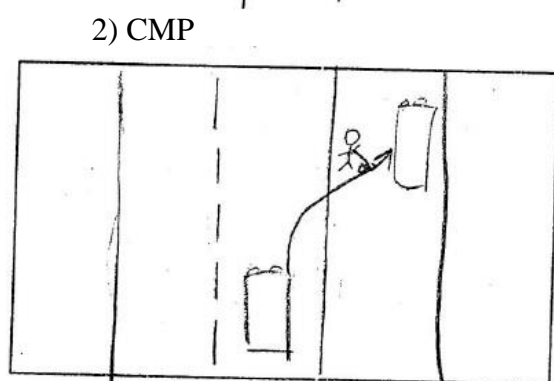
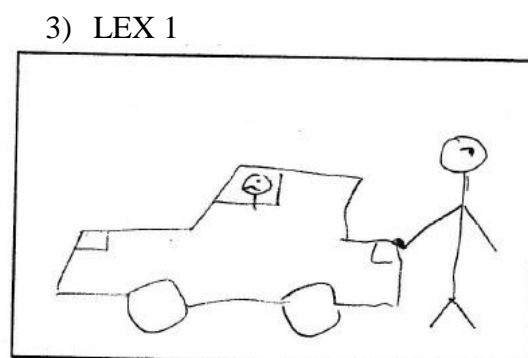
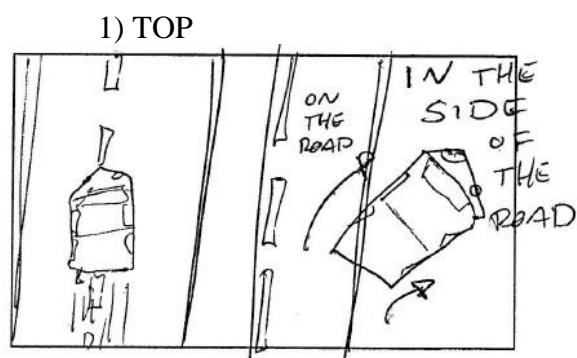
- 1) TOP – “in the side of the road there is usually a space where a car can stop if it needs to, if you have to stop you would pull your car into that space”
- 2) CMP – “‘pull’ would be to transfer something from one place to another, ‘in’ would be to go into somewhere”
- 3) LEX – “as if someone in the road were pulling your car” // “pull in maybe pulling in the brake of the car in order to stop moving”
- 4) PPH – “if you pull in, you slow down your vehicle and turn aside”
- 5) MIS – /

In **the pictorial representations, the Croats** drew **3** topological drawings, **5** compositional drawings, **1** lexical drawing, **5** visual paraphrases, and **1** no picture. **The Mexicans** drew **2** topological drawings, **3** compositional drawings, **2** lexical drawings, and **8** visual paraphrases.

There was topology referring to *pull in* in this meaning among both groups (Cro 3/14 vs. Mex 2/15). Topological drawings included – *a car going into the side of the road (arrow=direction)*. Compositional drawings (Cro 5/14 vs. Mex 3/15) included – *pull + the car + into the side of the road. The arrow pointing towards in was attached to the car so that we can tell it is simultaneously a rope (pull). Pull* was sometimes written near *the arrow*. In one case, there was *a person pulling the rope/arrow*. Lexical drawings (Cro 1/14 vs. Mex 2/15) included – *pulling the handbrake, the steering wheel, or your car*.

Unlike in the verbal answers, where both groups showed more tendencies towards topology and the Croats also towards compositionality, here there were more visual paraphrases (Cro 5/14 vs. 8/15). They mostly included – *a car on the side of the road*.

Here are the examples of all the categories we had:



### 2.3.1.2.5.3 *pull out* ('stop being involved in something')

There were **30/30** verbal answers and pictorial representations of the particle verb *pull out* and its meaning 'stop being involved in something'.

In **the verbal answers**, among **the Croats** there were **10** topological answers, **4** compositional answers, and **1** paraphrase. **The Mexicans** gave **5** topological answers, **7** compositional answers, **2** paraphrases, and **1** misinterpretation.

There were more answers referring to topology among the Croats (Cro 10/15) than among the Mexicans (Mex 5/15). The most prototypical answer included – *you + pull + yourself + out of the action/activity/situation/crowd/group/commitment/plan/conversation*. In the rest of the answers, both groups showed more tendencies towards compositionality (Cro 4/15 vs. Mex 7/15). Those answers also included – *you + pull + yourself* and *out of something*. It was interesting to see that one Croat assigned the following meaning to the

particle *out – not present*. For *pull*, they used synonyms like – *take, drag, and get*. Many topological and compositional answers included the *in vs. out* juxtaposition. You first had to be *involved in something* to be able to, e.g. *pull out of it*. Paraphrases (Cro 1/15 vs. Mex 2/15) included – ‘stop being involved in something’.

Here are the examples of all the categories we had:

- 1) TOP – “to pull yourself out of a commitment, arrangement, deal”
- 2) CMP – “drag oneself out of something one is involved in”
- 3) LEX – /
- 4) PPH – “I imagine someone separating himself from a group”
- 5) MIS – “get free from a trouble you were in”

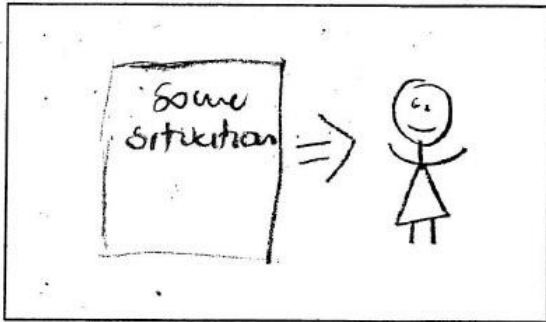
In **the pictorial representations, the Croats** drew **6** topological drawings, **5** compositional drawings, **1** lexical drawing, and **3** visual paraphrases. **The Mexicans** drew **3** topological drawings, **5** compositional drawings, **2** lexical drawings, **4** visual paraphrases, and **1** misinterpretation.

There were more drawings referring to topology among the Croats (Cro 6/15) than among the Mexicans (Mex 3/15). The most prototypical drawing included *a people scenario – a person going out of (a container of) a crowd of people*. *Out* was usually *an arrow pointing out of the container/crowd*. Compositional drawings (Cro 5/15 vs. Mex 5/15) included – *pull + yourself/somebody + out of a container (activity, action) or out of a crowd of people*. In most cases there was no person on the other side doing *the pulling* because, as we have seen in the verbal answers, *you are the one pulling yourself out*. Thus, if *the arrow* pointing towards *out* was attached to *the person going out*, it was considered *a rope (pull)* and not topology. It had to be in some way obviously *pull*. Sometimes *pull* was written and sometimes *pull* was seen in *a person taking somebody by the hand – out of a crowd of people*.

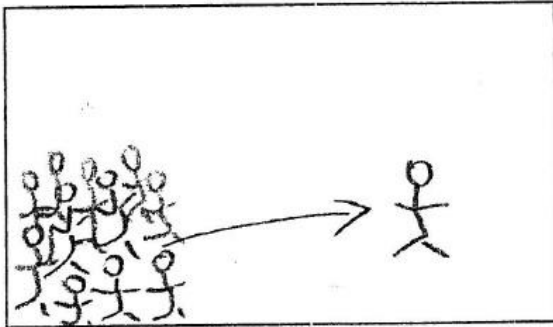
Unlike in the verbal answers, where the Croats showed more tendencies towards topology and the Mexicans towards compositionality, here both groups leaned more towards showing us both the verb and the particle. Lexical drawings (Cro 1/15 vs. Mex 2/15) included – *a person pulling somebody*. Visual paraphrases (Cro 3/15 vs. Mex 4/15) were about ‘stop being involved in something’.

Here are the examples of all the categories we had:

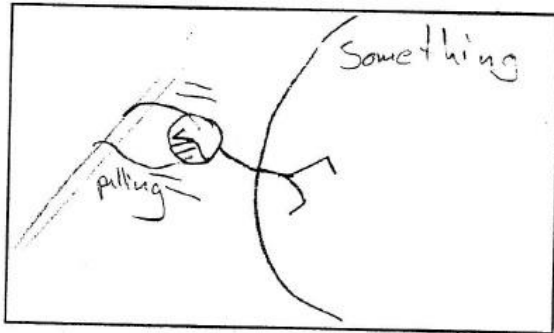
1) TOP



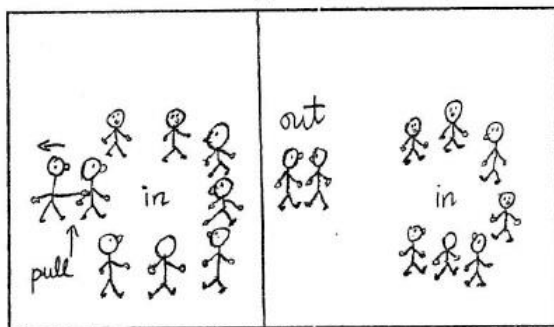
TOP 2



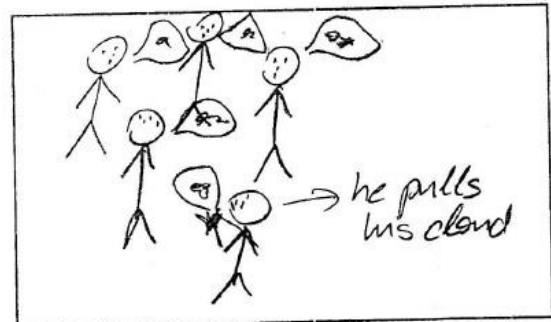
2) CMP



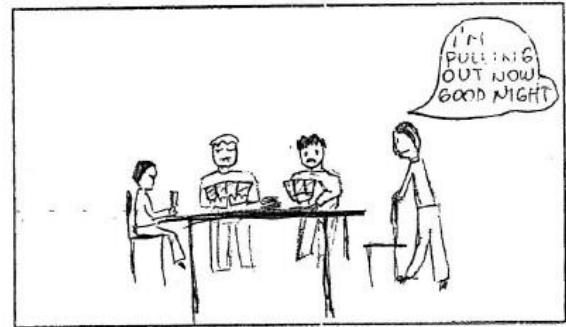
CMP 2



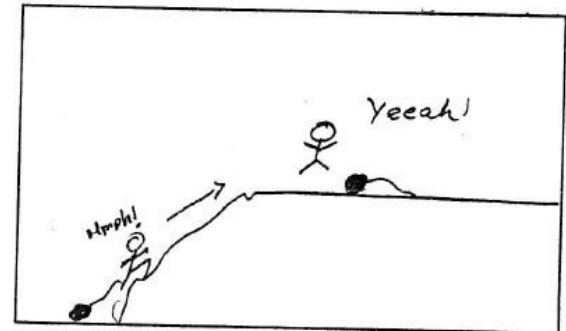
3) LEX



4) PPH



5) MIS



### 2.3.1.2.5.4 Discussion and Conclusions: *pull in* and *pull out*

In conclusion, in the verbal answers for *pull in* and all its meanings ('attract people in large numbers'; 'move to the side of the road to stop') topology occurred equally among both groups. However, compositionality occurred more among the Croats. Lexical determination occurred more among the Mexicans. Paraphrases also occurred more among the Mexicans (Table 33).

Table 33. Results of the verbal answers for the PV *pull in*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and <i>IN</i>	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>PULL IN</b> (‘attract people in large numbers’)	1	12	1	1	-	-	1	5	5	4	-	-
<b>PULL IN</b> (‘move to the side of the road to stop’)	5	5	2	2	-	1	6	1	3	5	-	-

In the answers for *pull out* ('stop being involved in something') there was more topology among the Croats, but compositionality occurred more among the Mexicans (Table 34). In one case, *out* was assigned the following meaning – *not present*.

Table 34. Results of the verbal answers for the PV *pull out*

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and <i>OUT</i>	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
<b>PULL OUT</b> ('stop being involved in something')	10	4	-	1	-	-	5	7	-	2	1	-

However, in the pictorial representations of *pull in* and all its meanings ('attract people in large numbers'; 'move to the side of the road to stop'), topology occurred slightly more among the Croats. Compositionality occurred significantly more among the Croats. Lexical determination occurred more among the Mexicans. Visual paraphrases also occurred more among the Mexicans (Table 35).

Table 35. Results of the pictorial representations of the PV pull in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
PULL IN (‘attract people in large numbers’)	1	8	4	2	-	-	-	3	8	4	-	-
PULL IN (‘move to the side of the road to stop’)	3	5	1	5	-	1	2	3	2	8	-	-

In the drawings of *pull out* (‘stop being involved in something’), there was more topology among the Croats and compositionality occurred equally among both groups. Lexical determination and visual paraphrases occurred among both groups (Table 36).

Table 36. Results of the pictorial representations of the PV pull out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
PULL OUT (‘stop being involved in something’)	6	5	1	3	-	-	3	5	2	4	1	-

### 2.3.1.2.6 *shut in and shut out*

In the next section we analyse the verbal answers and pictorial representations of the PVs *shut in* and *shut out* and their meanings. Overall there were 88 verbal answers and 90 pictorial representations.

There were 29 verbal answers and 30 pictorial representations of *shut in*. We analysed the following meaning:

- 1) ‘trap or injure something by closing something tightly around it’

There were 59 verbal answers and 60 pictorial representations of *shut out*. We analysed the following meanings:

- 1) ‘refuse to allow a person to share your thoughts, feelings etc.’;
- 2) ‘stop something from entering’.

#### 2.3.1.2.6.1 *shut in* (‘trap or injure something by closing something tightly around it’)

There were **29/30** verbal answers and **30/30** pictorial representations of the particle verb *shut in* and its meaning ‘trap or injure something by closing something tightly around it’.



In the verbal answers, among the Croats there was 0 topological answers, 14 compositional answers, and 1 paraphrase. The Mexicans gave 0 topological answers, 9 compositional answers, 3 lexical answers, 1 paraphrase, 1 misinterpretation, and 1 no text.

The most prototypical answers referring to *shut in* in this meaning were compositional (Cro 14/15 vs. Mex 9/14). The first association here is to mention the process of *shutting something – closing something inside something* or *close the door* so that whatever is inside, stays *inside*. Lexical determination was more typical for the Mexicans (Cro 0/15 vs. Mex 3/14) and those answers included – *shut + something*. Paraphrases included - ‘trap or injure something by closing something tightly around it’.

Here are the examples of all the categories we had:

- 1) TOP – /
- 2) CMP – “‘shut’ by itself implies that something is closed, while ‘in’ in this case denotes place – inside something”
- 3) LEX – “close a door or hatch carelessly”
- 4) PPH – “to shut something in means to encircle something around it”
- 5) MIS – “like arms that are a trap, so once you shut them, you can get in the person you hugged”

In the pictorial representations, the Croats drew 0 topological drawings, 3 compositional drawings, 6 lexical drawings, and 6 visual paraphrases. The Mexicans drew 1 topological drawing, 3 compositional drawings, 2 lexical drawings and 9 visual paraphrases.

There was topology only among the Mexicans (Cro 0/15 vs. 1/15). The drawing was very specific. There was *a mouse going into a box* – it is halfway through the entrance. In the box, we can see what is presumably *a piece of cheese*. The context – *a trap* – is there. The only thing that is not visible is the process of shutting. We could speculate that it will happen; but we do not actually see it. Thus, this is a topological drawing (see the picture below). Compositional answers (Cro 3/15 vs. Mex 3/15) included *shutting the door of a container and arrows (direction) towards inside*. It was usually *a trapped animal scenario*.

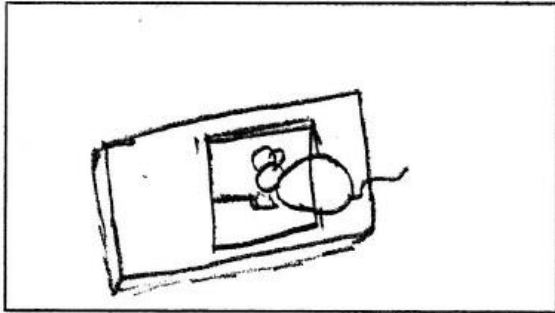
Unlike in the verbal answers, here lexical determination was more typical for the Croats (Cro 6/15 vs. Mex 2/15). It is important to note that there were two types of lexical drawings. In the first type, the process of shutting was visible, but no direction towards – *in*. In the second type, there was usually *a person in a closed container* with no possibility of going out. We could have categorized this as a visual paraphrase of *being trapped*.

However, visual paraphrases (Cro 6/15 vs. Mex 9/15) usually included – *a bear trap (+ animal)* and *a thief getting caught and is trapped, or an injury – hand + door scenario*.

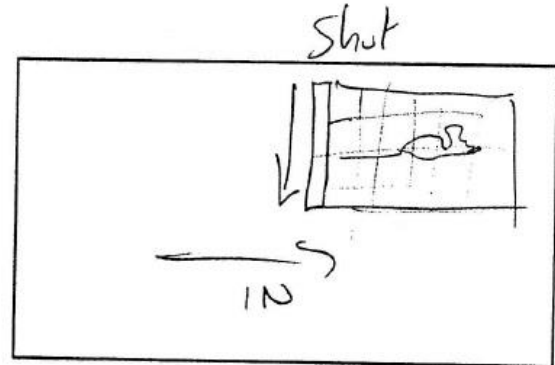
They usually did not include *a closed container* and if they did – the participant included the text saying – *shut in*, which is again just a visual paraphrase.

Here are the examples of all the categories we had:

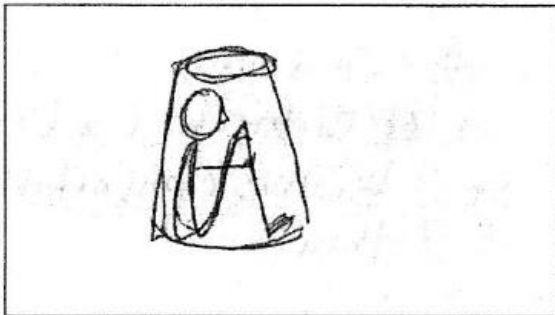
1) TOP



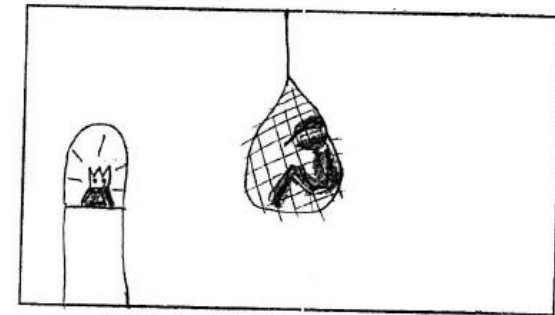
2) CMP



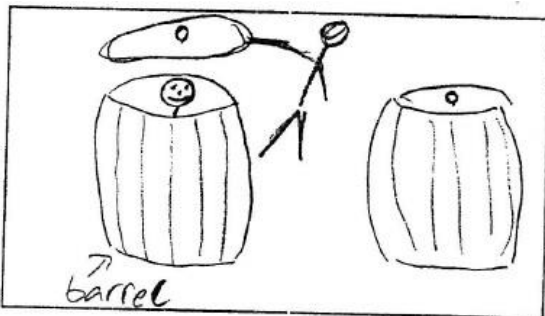
3) LEX



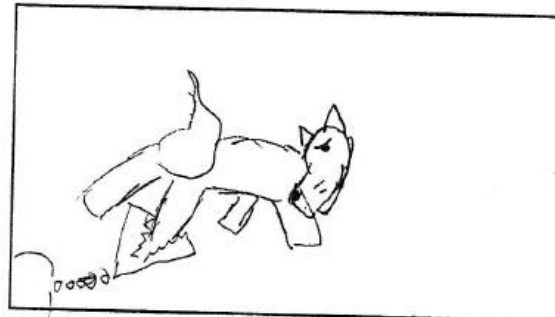
4) PPH



LEX 2



PPH 2



#### 2.3.1.2.6.2 *shut out* ('refuse to allow a person to share your thoughts, feelings etc.')

There were **30/30** answers in both verbal and pictorial representations of the particle verb *shut out* and its meaning 'refuse to allow a person to share your thoughts, feelings etc.'

In **the verbal answers**, among **the Croats** there was **1** topological answer, **11** compositional answers, **1** lexical answer, and **2** paraphrases. **The Mexicans** gave **0** topological answers, **8** compositional answers, **3** lexical answers, **2** paraphrases and **2** misinterpretations.

There was only one topological answer about *shut out* in this meaning (Cro 1/15 vs. Mex 0/15) and it included a metaphor of sharing your thoughts – *you allow him/her to dig all over your head* and then *you shut that person's fingers out from your head*. The most prototypical answers were compositional (Cro 11/15 vs. Mex 8/15). In the rest of the answers, the Mexicans showed more tendencies towards lexical determination (Cro 1/15 vs. Mex 3/15). The first association in explaining either compositionality or the lexical content is *a door/an entrance/a barrier* between your *mind/thoughts/feelings* and someone else. What matters is that *you* are primarily *shut* and whether they get to explaining the *out* is less relevant. For *shut*, the most used synonym was – *close*.

Here are the examples of all the categories we had:

- 1) TOP – “when a person shares your thoughts you allow him/her to ‘dig’ all over your head. When u refuse to do so, you shut that person’s fingers out from your head”
- 2) CMP – “you deny access to your mind, ‘shut’ all the entrances and leave a person ‘out’, outside of it”
- 3) LEX – “to close the option of sharing ideas”
- 4) PPH – “you don’t say anything, you keep it to yourself”
- 5) MIS – “to shut out an idea from someone to keep an original idea”

In **the pictorial representations, the Croats** drew only **1** topological drawing, **2** compositional drawings, **8** lexical drawings and **4** visual paraphrases. **The Mexicans** drew **0** topological drawings, **3** compositional drawings, **7** lexical drawings, **3** visual paraphrases and **2** misinterpretations.

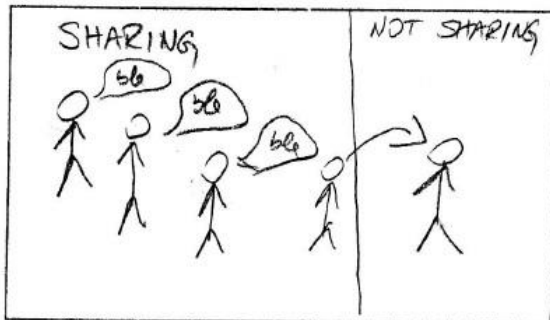
There was topology only among the Croats (Cro 1/15 vs. Mex 0/15). The drawing included *a person going out of the sharing sphere*. Compositional drawings (Cro 2/15 vs. Mex 3/15) mostly included *a person shut in a container* or *a shut mind* and *a person* outside. Both the verb and the particle were usually written in the drawing. In one case, there was *a wall between two people* and *the possibility to communicate went out*.

Unlike in the verbal answers, the most prototypical pictorial representations were lexical drawings (Cro 8/15 vs. Mex 7/15). Lexical content was usually demonstrated by a container with a *closed door*, a person in it and someone (one or more people) standing outside of it with no direction (*out*) from one container to the other shown. The container sometimes had an *X* drawn somewhere on it just to make sure we understood it was *shut*. Sometimes that *X* was drawn on a person’s mouth to include the fact that the person stopped talking. Some drawings included a person’s mind with *a closed door* on their forehead.

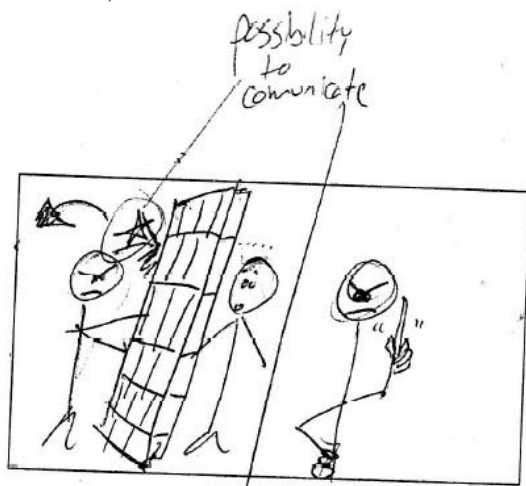
Similarly, the paraphrases (Cro 4/15 vs. Mex 3/15) also included *people scenarios*; in this case two people having a conversation and one person refusing to communicate further. It was interesting to see that only the Mexican students drew misinterpretations (Mex 2/15).

Here are the examples of all the categories we had:

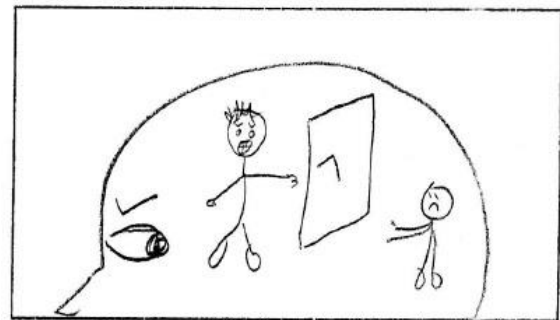
1) TOP



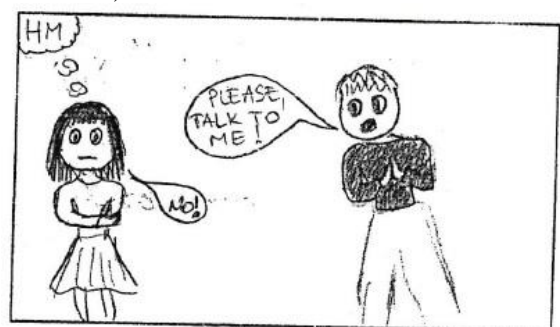
2) CMP



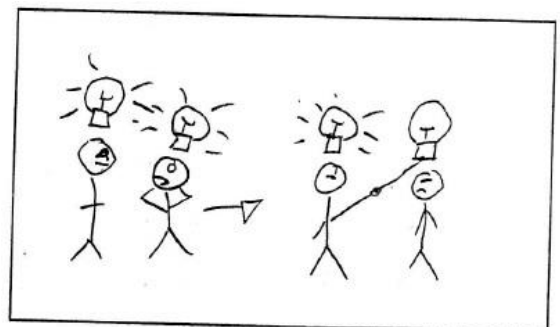
3) LEX



4) PPH



5) MIS



### 2.3.1.2.6.3 *shut out* ('stop something from entering')

There were **29/30** verbal answers and **30/30** pictorial representations of the particle verb *shut out* and its meaning 'stop something from entering'.

In the verbal answers, among the Croats there was **1** topological answer and **14** compositional answers. The Mexicans gave **2** topological answers, **8** compositional answers, **2** lexical answers, **2** paraphrases and **1** no text.

There was more topology among the Mexicans (2/14) than among the Croats (1/15). Topological answers included – *shut + somebody + out of a place/door*. The most

prototypical answers referring to *shut out* in this meaning were compositional (Cro 14/15 vs. Mex 8/14). The first association here is to mention *a door* or *an entrance* and build the explanation around it, just like it was visible in our previous example of *shut out*. The subject is usually *a person* that cannot get *in* and is left *outside*. The most used synonym for *shut* was – *close*. Unlike the Croats, in the rest of the answers, the Mexicans showed more tendencies towards all the other categories, including lexical determination (Mex 2/14). Lexical answers included – *shut/close* + *door/entrance*. There were no misinterpretations which tells us the meaning is clear to the participants.

Here are the examples of all the categories we had:

- 1) TOP – “to shut something outside of a door or window”
- 2) CMP – “if you ‘shut’ the door, that is, close it, someone who wanted to enter, come in, will stay ‘out’ of the place he wanted to enter”
- 3) LEX – “close a door quickly”
- 4) PPH – “I remember zombie movies and people putting things against the doors so they won’t come in”
- 5) MIS - /

In **the pictorial representations, the Croats** drew **7** compositional drawings, **3** lexical drawings and **5** visual paraphrases. **The Mexicans** drew **4** compositional drawings, **5** lexical drawings and **6** visual paraphrases.

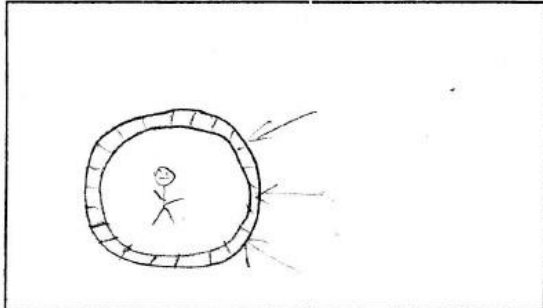
There was no topology here. Just like in the verbal answers, most pictorial representations were compositional (Cro 7/15 vs. Mex 4/15). Different containers usually demonstrated the lexical content in both compositional and lexical drawings – *a house or a building with a door* + *shut* (written), *a garage door closing* or just simply *a door* with an *X* so that we understand better it is shut. It included different *people scenarios*. Usually one person on the inside and the other one on the outside of *a container/door*. The verb and the particle were usually written in compositional drawings. Compositional drawings also included – *a closed door/container* and *an arrow (direction)* towards *in* that cannot get *in* but stays *outside*.

However, what was visible in lexical drawings (Cro 3/15 vs. Mex 5/15) was the *in* vs. *out* juxtaposition but no direction from one sphere to the other. When something is *shut*, it is logical that something on the other side cannot get in, so the participants probably felt no need to show us anything more than that. Visual paraphrases (Cro 5/15 vs. Mex 6/15) included – *people stopped from entering*. Usually *a person* or *a door* was preventing them to enter. The latter was not considered lexical because the process of *shutting* was not visible and there was

no *X* denoting *shut* anywhere. There should be a clear distinction between these two categories.

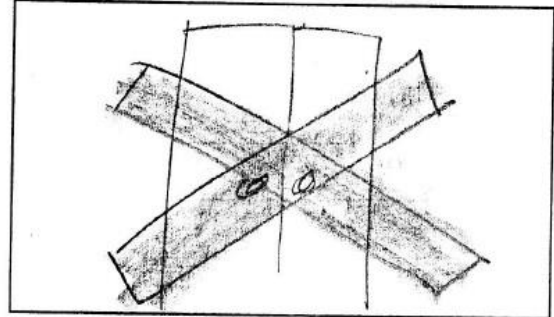
Here are the examples of all the categories we had:

2) CMP

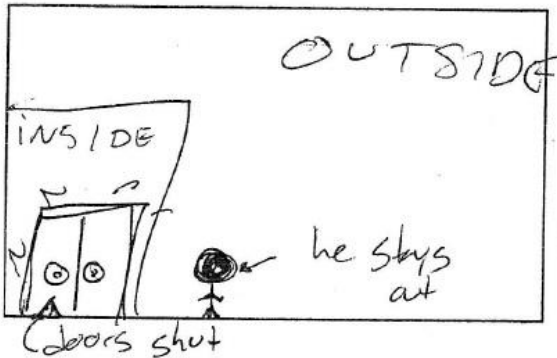


CMP 2

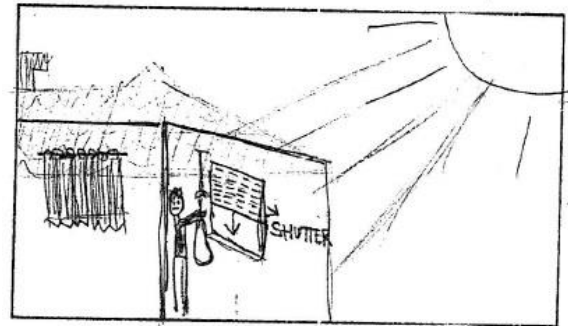
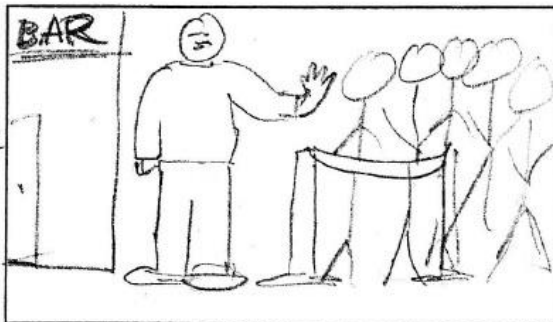
3) LEX



LEX 2



4) PPH



#### 2.3.1.2.6.4 Discussion and Conclusions: *shut in* and *shut out*

In conclusion, in the verbal answers for both *shut in* ('trap or injure something by closing something tightly around it') and *shut out* and all its meanings ('refuse to allow a person to share your thoughts, feelings etc.'; 'stop something from entering') there was almost no topology (Table 37; Table 38). There were a lot of compositional answers among both groups but significantly more among the Croats. Lexical determination occurred more among the Mexicans. Misinterpretations occurred only among the Mexicans.

Table 37. Results of the verbal answers for the PV shut in

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
SHUT IN (‘trap or injure something by closing something tightly around it’)	-	14	-	1	-	-	-	9	3	1	1	1

Table 38. Results of the verbal answers for the PV shut out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
SHUT OUT (‘refuse to allow a person to share your thoughts, feelings etc.’)	1	11	1	2	-	-	-	8	3	2	2	-
SHUT OUT (‘stop something from entering’)	1	14	-	-	-	-	2	8	2	2	-	1

In the pictorial representations of *shut in* (‘trap or injure something by closing something tightly around it’) and *shut out* and all its meanings (‘refuse to allow a person to share your thoughts, feelings etc.’; ‘stop something from entering’), there was almost no topology (Table 39; Table 40). Compositionality occurred almost equally among both groups, except with *shut out* (‘stop something from entering’) where it was more typical for the Croats. Lexical determination varied. Interestingly, with *shut in* (‘trap or injure something by closing something tightly around it’) it was more typical for the Croats. With *shut out* and all its meanings (‘refuse to allow a person to share your thoughts, feelings etc.’; ‘stop something from entering’), it occurred almost equally. There were also many visual paraphrases among both groups. Misinterpretation occurred only with *shut out* (‘refuse to allow a person to share your thoughts, feelings etc.’) and only among the Mexicans. Unlike in the verbal answers, with *shut out* it was sometimes problematic to distinguish between lexical drawings and visual paraphrases.

Table 39. Results of the pictorial representations of the PV shut in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
SHUT IN (‘trap or injure something by closing something tightly around it’)	-	3	6	6	-	-	1	3	2	9	-	-

Table 40. Results of the pictorial representations of the PV shut out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
SHUT OUT (‘refuse to allow a person to share your thoughts, feelings etc.’)	1	2	8	4	-	-	-	3	7	3	2	-
SHUT OUT (‘stop something from entering’)	-	7	3	5	-	-	-	4	5	6	-	-

### 2.3.1.2.7 write in and write out

In the next section we analyse the verbal answers and pictorial representations of the PVs *write in* and *write out* and their meanings. Overall there were 59 verbal answers and 58 pictorial representations.

There were 30 answers and 30 pictorial representations of *write in*. We analysed the following meaning:

- 1) ‘write to ask or complain’.

There were 29 answers and 28 pictorial representations of *write out*. We analysed the following meaning:

- 1) ‘write something and include all the necessary information’.

#### 2.3.1.2.7.1 write in (‘write to ask or complain’)

There were **30/30** verbal answers and pictorial representations of the particle verb *write in* and its meaning ‘write to ask or complain’.



In the verbal answers, among the Croats there were 0 topological answers, 13 compositional answers, and 2 paraphrases. The Mexicans gave 0 topological answers, 8 compositional answers, 5 lexical answers, and 2 paraphrases.

There was no topology about *write in*. Most answers were compositional (Cro 13/15 vs. Mex 8/15). Compositional answers included – *you + write (a letter)* and *send/deliver + into an institution/office* or less frequently – *write something (a complaint)* and *put it in the mailbox/complaint box* (Cro 1/13 CMP vs. Mex 4/8 CMP). In one case, there was no *write* but only – *you take + your opinion + into someone else’s sphere of activities* (Mex 1/8 CMP). This was categorized as compositional because it did include *a person* doing *the action*. There was also one answer (Cro 1/13 CMP) where *write in* was *write + your complaints + in the book of complaints*. We could argue that this is just what happens when you *write*. However, the participant was trying to make sense of *in*, whereas those participants that showed tendencies towards lexical determination only mentioned *write + to somebody*, *write + a complaint/letter* or just equated *write* with *put something + in/on paper*. Lexical determination was noticed only among the Mexicans (Mex 5/15). It was interesting to see that 2 Croats assigned the following meanings to the particle *in* – *visible* and *inquiry*.

Here are the examples of all the categories we had:

- 1) TOP – “literally you take your complaint into someone else’s sphere of activities”
- 2) CMP – “when you ‘write in’, you usually ‘write’ a letter to an institution – the letter goes ‘in’ there and then somebody in charge reads it, and responds”
- 3) LEX – “write is put something on paper”
- 4) PPH – “put in your opinion”
- 5) MIS – /

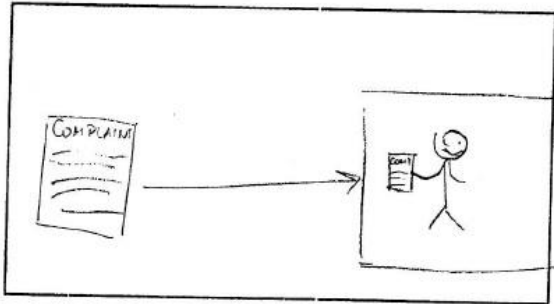
In the pictorial representations, the Croats drew 5 topological drawings, 4 compositional drawings, 4 lexical drawings, and 2 visual paraphrases. The Mexicans drew 3 topological drawings, 5 compositional drawings, 5 lexical drawings, and 2 visual paraphrases.

There were more topological drawings about *write in* in this meaning among the Croats (Cro 5/15) than among the Mexicans (Mex 3/15). The most prototypical topological drawing included – *a letter/complaint* going *into an institution/complaint box/mailbox*. The *complaint box/mailbox scenario* was more typical for the Mexicans (Cro 1/5 TOP vs. Mex 3/3 TOP). Compositional drawings (Cro 4/15 vs. Mex 5/15) included – *(a person) + write + a letter* and *(take) + into an institution* or *write + put + into an opinion box* (Mex 2/5 CMP). In 3 cases (Cro 1/4 CMP vs. Mex 2/5 CMP) there was *a person putting/taking the letter into the box/the institution* but *write* was not visible. However, these were considered compositional

as they did include *a person doing the actions*. Unlike in the verbal answers, where both groups showed no tendencies towards topology and most answers were compositional, and lexical determination was typical only for the Mexicans, here both groups leaned more towards topology, compositionality, and lexical determination (Cro 4/15 vs. Mex 5/15). Lexical drawings included – *writing*. Visual paraphrases included – *a letter/complaint*.

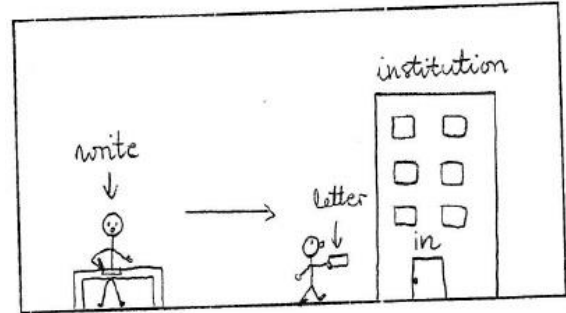
Here are the examples of all the categories we had:

1) TOP

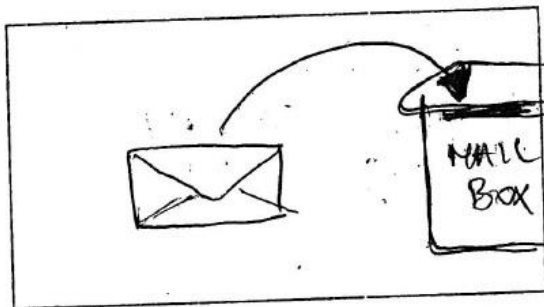


TOP 2

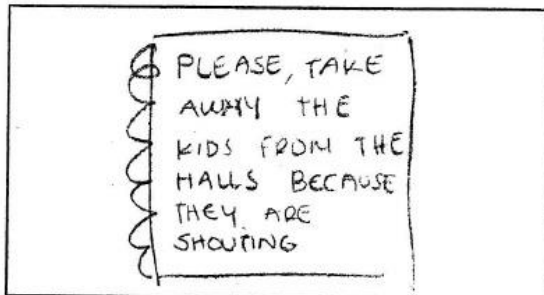
2) CMP



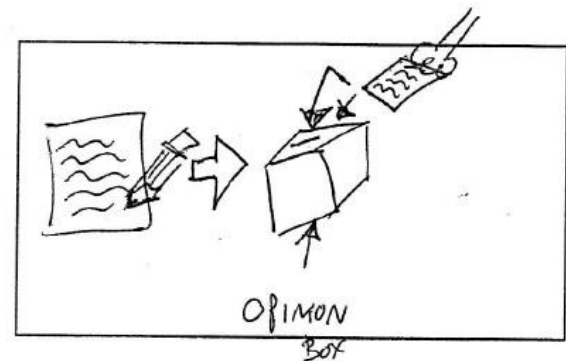
CMP 2



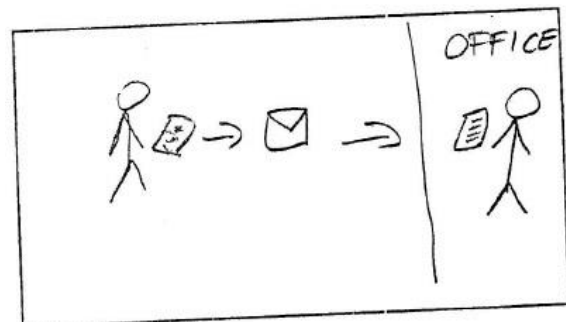
4) PPH



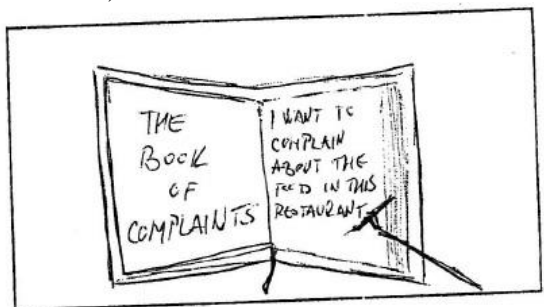
3) LEX



CMP 3



LEX 2



### 2.3.1.2.7.2 *write out* ('write something and include all the necessary information')

There were **29/30** verbal answers and **28/30** pictorial representations of the particle verb *write out* and its meaning 'write something and include all the necessary information'.

In **the verbal answers**, among **the Croats** there were **0** topological answers, **9** compositional answers, **1** lexical answer, **3** paraphrases, **1** misinterpretation, and **1** no text. **The Mexicans** gave **1** topological answer, **6** compositional answers, **6** paraphrases, and **2** misinterpretations.

There was only 1 topological answer about *write out* in this meaning (Mex 1/15). It included – *all needed must go out* and *write* was not mentioned. In the rest of the answers, both groups showed tendencies towards compositionality (Cro 9/14 vs. Mex 6/15). Compositional answer included – *get + the info + out of your head* and *write it on paper* and *take all the information that is out and put/write it in your paper*. Paraphrases (Cro 3/14 vs. Mex 6/15) included – *write all the necessary information and use all the space*. It was sometimes hard to distinguish between lexical answers and paraphrases because the given meaning included the verb. However, if the emphasis was on *the information* it was categorized as a paraphrase.

Here are the examples of all the categories we had:

- 1) TOP – “everything needed must go out”
- 2) CMP – “you have all the information about something in your head and when you want to write something on a particular subject you get the information out of your head and write it”
- 3) LEX – “if you write something out, you write a detailed account of it”
- 4) PPH – “summarize some important information and put it in a paper” // “to write everything necessary as if to write over the paper”
- 5) MIS – “someone is surrounded by huge piles of papers and that person is trying to collect it all”

In **the pictorial representations**, **the Croats** drew **4** topological drawings, **3** compositional drawings, **3** lexical drawings, **3** visual paraphrases, **1** misinterpretation, and **1** no picture. **The Mexicans** drew **1** topological drawing, **1** compositional drawing, **4** lexical drawings, **6** visual paraphrases, **2** misinterpretations, and **1** no picture.

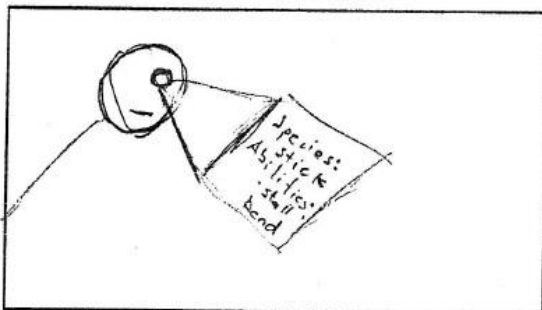
There were more topological drawings about *write out* in this meaning among the Croats (Cro 4/14) than among the Mexicans (Mex 1/14). They included – *ideas going out of a container; information going out of the head into the paper* and *information that is out is going into the paper (in vs. out juxtaposition)*. But there were also drawings that included -

information going out of the limits of the paper (arrow – out) where the process of writing was not visible (Cro 1/4 TOP). The participant tried to explain the particle and necessary information was somehow incorporated, so this was accepted. Compositional drawings (Cro 3/14 vs. Mex 1/14) included – write information + out of your brain or write information, that is out, on paper. Write was either written or the person was holding a pencil. In two cases, there was – a pencil pushing the unnecessary information out and doubts going out of the paper. These were categorized as visual paraphrases rather than misinterpretations because in a way they included the meaning and could be perceived as something that happens when you include all the information.

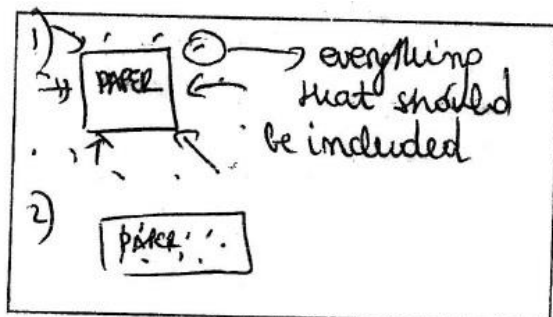
Unlike in the verbal answers, where answers were compositional or paraphrases, here both groups showed more tendencies towards topology, compositionality, and lexical determination (Cro 3/14 vs. Mex 4/14). Lexical drawings included – writing information on a piece of paper or in two cases – a person typing on the computer (Mex 2/4 LEX). Visual paraphrases (Cro 3/14 vs. Mex 6/14) included – a piece of paper + info or in one case (Mex 1/4 PPH) – a computer. Here it was easier to distinguish between lexical drawings and visual paraphrases than it was in the verbal answers.

Here are the examples of all the categories we had:

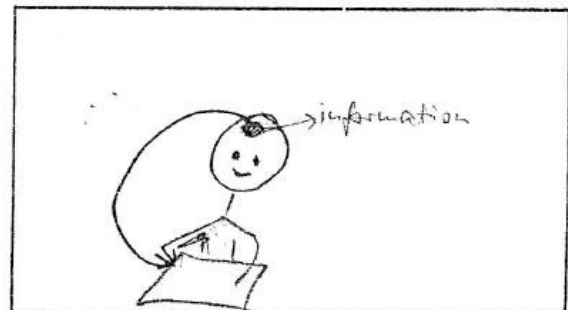
1) TOP



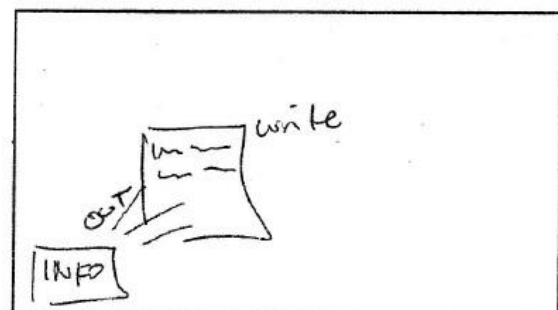
TOP 2



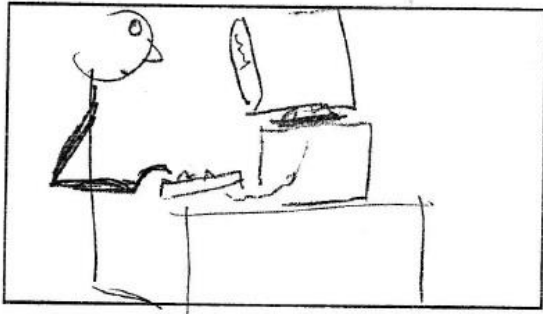
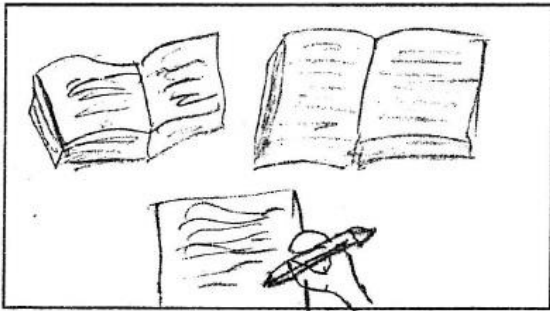
2) CMP



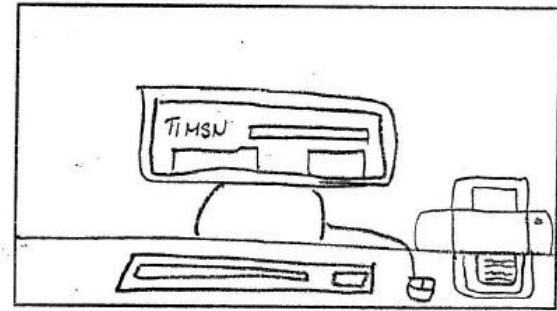
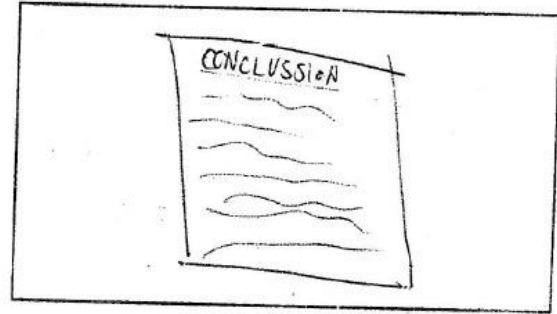
CMP 2



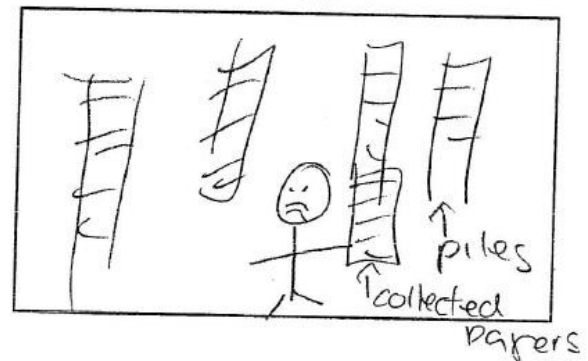
3) LEX & LEX 2



4) PPH & PPH 2



5) MIS



### 2.3.1.2.7.3 Discussion and conclusions: *write in* and *write out*

In conclusion, in the verbal answers for *write in* ('write to ask or complain') and *write out* ('write something and include all the necessary information'), there was almost no topology. Compositionality occurred more among the Croats (Table 41; Table 42). Lexical determination occurred more with *write in* than *write out* and it was more typical for the Mexicans. Paraphrases occurred more with *write out* and more among the Mexicans. Misinterpretations occurred only with *write out* and more among the Mexicans. It was interesting to see that with *write in* the Mexicans used *a complaint + mailbox/complaint box scenario* more than the Croats. Some Croatian participants assigned the following meanings to the particle *in* – *visible* and *inquiry*.

Table 41. Results of the verbal answers for the PV write in

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
WRITE IN (‘write to ask or complain’)	-	13	-	2	-	-	-	8	5	2	-	-

Table 42. Results of the verbal answers for the PV write out

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
WRITE OUT (‘write something and include all the necessary information’)	-	9	1	3	1	1	1	6	-	6	2	-

In the pictorial representations of *write in* (‘write to ask or complain’) and *write out* (‘write something and include all the necessary information’), there was topology unlike in the verbal answers and it occurred more among the Croats (Table 43; Table 44). Compositionality occurred more with *write in* and equally among both groups, but with *write out* it occurred more among the Croats. Lexical determination occurred among both groups, more than in the verbal answers, and slightly more among the Mexicans. Visual paraphrases occurred among both groups but more with *write out* and more among the Mexicans. Misinterpretations occurred only with *write out*. It was interesting to see that with *write in* The Mexicans used a *complaint + mailbox/complaint box scenarios* more than the Croats.

Table 43. Results of the pictorial representations of the PV write in

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
WRITE IN (‘write to ask or complain’)	5	4	4	2	-	-	3	5	5	2	-	-

Table 44. Results of the pictorial representations of the PV write out

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
WRITE OUT (‘write something and include all the necessary information’)	4	3	3	3	1	1	1	1	4	6	2	1

### 2.3.1.2.8 Discussion and Conclusions: PVs containing heavy verbs

In the verbal answers for the PVs containing heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particle *in* it is visible that there were few topological answers. The highest frequency of topology was noted with *pull in* (‘move to the side of the road to stop’). Compositionality occurred most frequently among both groups, but significantly more among the Croats (Table 45). Lexical determination, in turn, occurred significantly more among the Mexicans. Paraphrases and misinterpretations occurred among both groups but more among the Mexicans. Some participants assigned the following meanings to the particle *in* – *closed*, *hidden*, *dark* and *visible* and *inquiry*. It occurred only with the PVs *draw in* and *write in* and more among the Croats. The Mexicans also showed more tendencies towards the use of *a complaint + mailbox/complaint box scenario* when explaining *write in*.

Table 45. Results of the verbal answers for the PVs with heavy verbs + IN

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
CALL IN (3)	2	29	4	4	6	-	-	12	14	10	8	1
CUT IN (1)	1	13	-	1	-	-	1	8	4	2	-	-
BREAK IN (3)	3	30	6	5	1	-	4	18	13	6	4	-
DRAW IN (1)	3	7	1	2	2	-	3	4	4	4	-	-
PULL IN (2)	6	17	3	3	-	1	7	6	8	9	-	-
SHUT IN (1)	-	14	-	1	-	-	-	9	3	1	1	1
WRITE IN (1)	-	13	-	2	-	-	-	8	5	2	-	-
RESULTS	15	123	14	18	9	(1)	15	65	51	34	13	(2)
	179						178					
	357											

In the verbal answers for the PVs containing heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particle *out* it is visible that there were fewer topological answers as well. The highest frequency of topology was noted with *pull out* ('stop being involved in something'). Compositionality occurred most frequently among both groups but significantly more among the Croats (Table 46). Lexical determination, in turn, occurred significantly more among the Mexicans. Paraphrases and misinterpretations occurred among both groups, but more so among the Mexicans. Some participants assigned the following meanings to the particle *out* - *abandoned*, *absence*, *absent*, *acceptable*, *accessible*, *away*, *broken*, *completely*, *dead*, *displace*, *end*, *far away*, *free*, *freedom*, *forsaken*, *gone*, *longer time*, *make/become visible*, *negative*, *no longer*, *no more*, *not present*, *public*, and *stretch*. It occurred with the PVs *cut out*, *break out*, *draw out* and *pull out*. *Reverse viewing* occurred among both groups with *draw out* ('make somebody feel less nervous or shy'). It was interesting to see that in their compositional answers for the PV *draw out* and all its meanings, primarily the Mexicans showed tendencies towards describing the verb *draw* in its first meaning – *draw lines*.

Table 46. Results of the verbal answers for the PVs with heavy verbs + OUT

PARTICLE VERBS	VERBAL ANSWERS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
CALL OUT (1)	1	6	3	1	4	-	2	4	4	2	3	-
CUT OUT (3)	6	30	5	4	-	-	2	10	20	13	-	-
BREAK OUT (3)	5	32	1	7	-	-	4	16	12	12	1	-
DRAW OUT (2)	6	18	-	3	3	-	3	20	2	4	1	-
PULL OUT (1)	10	4	-	1	-	-	5	7	-	2	1	-
SHUT OUT (2)	2	25	1	2	-	-	2	16	5	4	2	1
WRITE OUT (1)	-	9	1	3	1	1	1	6	-	6	2	-
RESULTS	<b>30</b>	<b>124</b>	<b>11</b>	<b>21</b>	<b>8</b>	<b>(1)</b>	<b>19</b>	<b>79</b>	<b>43</b>	<b>43</b>	<b>10</b>	<b>(1)</b>
	<b>194</b>						<b>194</b>					
	<b>388</b>											

In the pictorial representations of the PVs containing heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particle *in* it is visible that topology occurred slightly more than in the verbal answers among the Croats, but less than in the verbal answers among the Mexicans (Table 47). The highest frequency of topology was noted with *write in* (write to ask or complain). Compositionality occurred half as much as in the verbal answers, but still significantly more among the Croats. Lexical determination occurred among both groups and slightly more among the Mexicans. However, the number of lexical answers among the



Mexicans corresponds to the number of lexical drawings, while the number of lexical determination among the Croats tripled. Visual paraphrases also occurred among both groups but significantly more among the Mexicans. Misinterpretations occurred among both groups. The Mexicans showed more tendencies towards the use of *a complaint + mailbox/complaint box scenario* when drawing *write in*.

Table 47. Results of the pictorial representations of the PVs with heavy verbs + IN

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and IN	T	C	L	P	M	N	T	C	L	P	M	N
	O	M	E	P	I	D	O	M	E	P	I	D
	P	P	X	H	S		P	P	X	H	S	
CALL IN (3)	7	16	9	8	5	-	-	6	13	15	10	-
CUT IN (1)	2	6	3	4	-	-	1	3	3	8	-	-
BREAK IN (3)	3	18	6	18	-	-	1	8	10	26	-	-
DRAW IN (1)	3	3	1	7	1	-	1	-	4	10	-	-
PULL IN (2)	4	13	5	7	-	1	2	6	10	12	-	-
SHUT IN (1)	-	3	6	6	-	-	1	3	2	9	-	-
WRITE IN (1)	5	4	4	2	-	-	3	5	5	2	-	-
RESULTS	<b>24</b>	<b>63</b>	<b>34</b>	<b>52</b>	<b>6</b>	<b>(1)</b>	<b>9</b>	<b>31</b>	<b>47</b>	<b>82</b>	<b>10</b>	<b>-</b>
	<b>179</b>						<b>179</b>					
	<b>358</b>											

In the pictorial representations of the PVs containing heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particle *out* it is visible that there were fewer topological drawings than verbal answers, but they occurred more among the Croats (Table 48). The highest frequency of topology was noted with *pull out* ('stop being involved in something'). Compositionality occurred half as much as in the verbal answers, but still more among the Croats. Lexical determination occurred among both groups and slightly more among the Mexicans. Lexical determination increased among both groups and among the Croats it tripled. Visual paraphrases were the most frequent drawings among both groups. Misinterpretations occurred among both groups as well, but slightly more among the Mexicans. *Reverse viewing* occurred among both groups with *draw out* ('make somebody feel less nervous or shy'). It was interesting to see that in their compositional drawings of the PV *draw out* and all its meanings, primarily the Mexicans showed tendencies towards describing the verb *draw* in its first meaning – *draw lines*.

Table 48. Results of the pictorial representations of the PVs with heavy verbs + OUT

PARTICLE VERBS	PICTORIAL REPRESENTATIONS											
	THE CROATS						THE MEXICANS					
PVs with HEAVY VERBS and OUT	T O P	C M P	L E X	P P H	M I S	N D	T O P	C M P	L E X	P P H	M I S	N D
CALL OUT (1)	-	4	2	6	3	-	-	3	5	4	3	-
CUT OUT (3)	2	14	10	19	-	-	-	5	16	24	-	-
BREAK OUT (3)	6	18	3	18	-	-	-	8	10	24	1	2
DRAW OUT (2)	1	10	3	13	3	-	-	14	3	12	1	-
PULL OUT (1)	6	5	1	3	-	-	3	5	2	4	1	-
SHUT OUT (2)	1	9	11	9	-	-	-	7	12	9	2	-
WRITE OUT (1)	4	3	3	3	1	1	1	1	4	6	2	1
RESULTS	<b>20</b>	<b>63</b>	<b>33</b>	<b>71</b>	<b>7</b>	<b>(1)</b>	<b>4</b>	<b>43</b>	<b>52</b>	<b>83</b>	<b>10</b>	<b>(3)</b>
	<b>194</b>						<b>192</b>					
	<b>386</b>											

In conclusion, most of the verbal answers for the PVs containing heavy verbs *call*, *cut*, *break*, *draw*, *pull*, *shut*, and *write* and the particles *in* and *out* of both groups included less topology but most frequently compositionality. In the answers for the PVs containing the particle *in* and *out* both groups showed equal tendencies towards topology but there were significantly more compositional answers among the Croats. Lexical determination occurred significantly more among the Mexicans. Paraphrases occurred among both groups and slightly more among the Mexicans. Misinterpretations occurred among both groups as well. It is important to mention that the highest frequency of topology occurred with the PVs *pull in* and *pull out*. The Croats showed more tendencies towards assigning meanings to the particle *in* (*draw in*, *write in*) and, more notably, to the particle *out* (*cut out*, *break out*, *draw out*, *pull out*). *Reverse viewing* occurred among both groups, and only with *draw out*. The PV *draw out* was also interesting because in their compositional answers, the Mexicans described the verb *draw* in its first meaning. The Mexicans also showed more tendencies to a *complaint + mailbox/complaint + box scenario* when describing the PV *write in*.

However, in the pictorial representations the results varied. Topology occurred more among the Croats than the Mexicans with both *in* and *out*. However, on the one hand, among the Croats the number of topological drawings was slightly higher than the number of topological answers with the particle *in*. On the other hand, the number of topological drawings with the particle *in* among the Mexicans and the number of topological drawing with the particle *out* among both groups were lower than the number of topological answers. The highest frequency of topology was noted with *write in* and *pull out*. Compositionality

occurred significantly more among the Croats, but there were less compositional drawings than verbal answers. Lexical determination again occurred more than in the verbal answers and again more among the Mexicans. However, among the Croats not only did it appear more than it did in the verbal answers – it, in fact, tripled. Among the Mexicans there were also more lexical drawings than verbal answers with the particle *out*, while with the particle *in* the number did not change. Unlike in the verbal answers, here most of the drawings of both groups were visual paraphrases – with the particle *in* they occurred significantly more among the Mexicans, while with the particle *out* they occurred almost equally among both groups. Misinterpretations occurred among both groups but slightly more among the Mexicans. *Reverse viewing* occurred among both groups with *draw out*. The PV *draw out* was also interesting because in their compositional answers, the Mexicans drew the verb in its first meaning – *draw lines*. The Mexicans also showed more tendencies towards *a complaint + mailbox/complaint + box scenario* when drawing the PV *write in*.

### 2.3.2 CASE STUDIES

In the following section we present the case studies of three different participants. The aim was to choose three participants whose answers differed from one another in order to acknowledge that some kind of a developing strategy can be identified on an individual level of each questionnaire. We selected two Croatian participants and one Mexican. We analyse the questionnaires in that order. Each participant gave 45 answers and drew 45 drawings.

In the introduction of each case study we briefly explain why the questionnaires were selected. For the analysis to be clearer, the questionnaires were divided into **3 sets of answers** – each containing **15 answers**. Each set was then separated into **groups of 5**. This was done for both verbal and pictorial representations. After each analysis we will discuss the results. Discussion and conclusions of all three questionnaires will then follow.

#### 2.3.2.1 QUESTIONNAIRE 1

This questionnaire was selected because there was a lot of topology and compositionality among the verbal answers and we wanted to see if the same could be said about the pictorial representations. The participant was Croatian.

There were **45/45** answers in both verbal and pictorial representations of Questionnaire 1.

##### 2.3.2.1.1 Verbal answers: Questionnaire 1

In the verbal answers, there were **22** topological answers, **20** compositional answers, and **3** misinterpretations.

To be more precise, topology was more typical for the PVs containing light verbs (L 14/20 vs. H 8/25), while compositionality occurred more with the PVs containing heavy verbs (L 4/20 vs. H 16/25). There were no lexical answers, and misinterpretations were more typical for the PVs containing light verbs (L 2/20 vs. H 1/25).

For the analysis to be clearer, the questionnaire was divided into **3 sets of answers** – each containing **15 answers**. Each set was then separated into **groups of 5**.

#### 2.3.2.1.1.1 SET 1

In the first set of answers there are 7 PVs containing light verbs, and 8 PVs containing heavy verbs. There were **2** topological answers, **11** compositional answers and **2** misinterpretations. Both topological answers occurred with the PVs containing light verbs (L 2/7 vs. H 0/8), while compositional answers occurred primarily with the PVs containing heavy verbs (L 3/7 vs. H 8/8). Misinterpretations occurred with the PVs containing light verbs – *go out* and *put out*.

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the answer for *go out* ('stop burning'), the participant explains "there is...a spark in things that burn" and that "when that thing goes out from the thing that burns, it stops burning". So, it is not the fire that goes out, but something actually goes out of the fire. This is reverse viewing and it is a **misinterpretation**.

In the answer for *break in* ('wear something until it is comfortable'), the explanation revolves around a piece of clothing – *a shirt* in this case. First, "you buy a new shirt" that is "too tight" and then "you have to get in it" and you do that "by breaking a few threads". The participant makes sure to emphasize that you are not breaking stitches, but "you adjust" the shirt "to your body". The verb and the particle are explained separately. This is a **compositional answer**.

In the answer for *take out* ('obtain an official document or a service'), the participant uses a *drawer scenario* – "documents are usually taken out from a cabinet drawer...to get one you have to take it out". The verb *take* is used to explain the particle twice but the verb *get* is also mentioned. It is both a synonym of *obtain* and *take*. This is a **compositional answer**.

In the answer for *call in* ('make a short visit, usually on the way to another place'), the participant gives us context – "you see a friend" and then you "call his name and get in his house" – this is how you "call in". The verb is explained first and then another verb is used to explain the particle. This is a **compositional answer**.

In the answer for *put out* ('injure your back, shoulder, hip etc. '), the participant explains that "a joint is made of 2 parts and part 1 should be in part 2" but "if you put part 1

out from its original position, you hurt your joint (shoulder, hip...)”. The verb is used to explain the particle. The participant also drew this first and then gave the explanation, emphasizing where part 1 and 2 are in the picture and then ended with the provided meaning. Also, the *in* vs. *out* juxtaposition is used. This is a **topological answer**.

**Here are all 5 of the answers:**

- 1) **go out** (‘stop burning’) – **MIS** – “imagine that there is something (like a spark) in things that burn and when that thing goes out from the thing that burns, it stops burning”
- 2) **break in** (‘wear something until it is comfortable’) – **CMP** – “you buy a new shirt and it is too tight so you have to get in it by breaking a few threads (not stitches!) (you adjust it to your body)”
- 3) **take out** (‘obtain an official document or a service’) – **CMP** – “documents are usually taken out from a cabinet drawer, so in order to get it you have to take it out”
- 4) **call in** (‘make a short visit, usually on the way to another place’) – **CMP** – “you see a friend, call his name and get in his house; so you call in”
- 5) **put out** (‘injure your back, shoulder, hip etc.’) – **TOP** – “a joint is made of 2 parts, PART 1 should be in PART 2 (as demonstrated) but if you put part 1 out from its original position you hurt your joint (shoulder, hip,...)”

The next 5 PVs include 3 PVs with light verbs and 2 with heavy verbs.

In the answer for **go in** (‘become hidden’), the participant first gives us the context – “somebody is chasing you” and then “you go in a tent and he/she cannot see you, so you are hidden”. The verb is used to explain the particle. This is a **topological answer**.

The answer for **put out** (‘extinguish, stop from burning’) is similar to *go out* (‘stop burning’). The participant explains that “if you put a thing out from the fire, it will stop burning”. So, it is not that you put the fire *out of something*, but something is actually put *out* of fire. This is *reverse viewing* and it is a **misinterpretation**.

In the answer for **pull in** (‘attract people in large numbers’), the participant first gives us the context – “you have a great party in your house and there is a lot of good music which pulls people in your house”. The verb is used to explain the particle. However, the participant then goes on to say – “like fish in a fishnet”. *The fishnet analogy* refers to the action, it explains the verb which is why this is a **compositional answer**.

For **cut out** (‘prevent something from reaching somewhere’), the first association is *cutting*. The participant gives us the context – “a group of ants is trying to get to a jar of

honey” which is when “you cut their path with a broom and then you throw them out”. Another verb is used to explain the particle. This is a **compositional answer**.

In the answer for *put in* (‘officially make a claim for something’), the participant uses *a computer scenario* – “when you make a claim for something, somebody usually enters your data in a computer”. You know “your claim is official when the computer processes your data”. Here we have a synonym for the verb explaining the particle – *enter* is *put*. It was also important to mention that the process was official. This is a **compositional answer**.

**Here are all 5 of the answers:**

- 6) *go in* (‘become hidden’) – **TOP** – “somebody is chasing you, you go in a tent and he/she cannot see you; so you are hidden”
- 7) *put out* (‘extinguish, stop from burning’) – **MIS** – “if you put a thing out from the fire, it will stop burning (hopefully)”
- 8) *pull in* (‘attract people in large numbers’) – **CMP** – “you have a great party in your house and there is a lot of good music which pulls people in your house (like fish in a fishnet)”
- 9) *cut out* (‘prevent something from reaching somewhere’) – **CMP** – “when a group of ants is trying to get to a jar of honey you ‘cut’ their path with a broom and throw them out”
- 10) *put in* (‘officially make a claim for something’) – **CMP** – “when you make a claim for something, somebody (a clerk) usually enters your data into a computer, and when the computer process [sic] the data, your claim is official (I do not know how to draw a computer processing data)”

The third part of this set includes 4 PVs with heavy verbs and 1 PV with a light verb.

In the answer for *break out* (‘become covered in something, like in sweat or rash’), the participant uses *the rash scenario* to explain the PV – “drops of sweat...break out through the skin in order to get to surface and this results in the skin being covered in sweat”. The verb is used to explain the particle; however, the participant explains the verb as well. You have to get to the surface and you do that by breaking out *through* the skin. Thus, this is a **compositional answer**.

For *shut in* (‘trap or injure something by closing something tightly around it’), the first association is mentioning a door – “shutting the door” and while doing that “you accidentally shut your fingers in the door and hurt yourself”. First the verb is explained and then used to explain the particle. This is a **compositional answer**.

For *draw out* ('make something last longer'), the participant first uses a synonym for the verb (*stretch*) and then *draw* to explain the particle – “you stretch, draw something out from a pile”. To explain the action and the meaning once again, the participant says – “you rearrange it in order to make it physically longer”. This is a **compositional answer**.

In the answer for *break in* ('get somebody accustomed to something new'), the participant gives us a very specific image – a *doll scenario* – “you try to get a doll ‘accustomed’ to a new environment” and to do that – “you have to break it in order to get it in the bottle”. This is a **compositional answer**.

And, in the answer for *put out* ('make a figure or a result wrong'), the participant gives us the *in* vs. *out* juxtaposition – “when something happens according to plan, everything is neatly ‘put together’ in a very specific order but if you put something out of that order, you spoil it”. In the second part of the answer, the verb is used to explain the particle. However, we cannot ignore that things have to be “put together” in a specific order. The verb is also explained. Thus, this is a **compositional answer**.

**Here are all 5 of the answers:**

- 11) *break out* ('become covered in something, like in sweat or rash') – **CMP** – “drops of sweat have to break out through the skin in order to get to surface which results in the skin being covered in sweat”
- 12) *shut in* ('trap or injure something by closing something tightly around it') – **CMP** – “while shutting the door you accidentally shut your fingers in the door and hurt yourself”
- 13) *draw out* ('make something last longer') – **CMP** – “you stretch, draw something out from a pile and rearrange it in order to make it physically longer”
- 14) *break in* ('get somebody accustomed to something new') – **CMP** – “you try to get a doll ‘accustomed’ to a new environment (a bottle in this case) so you have to break it in order to get it in the bottle”
- 15) *put out* ('make a figure or a result wrong') – **CMP** – “when something happens according to plan, everything is neatly ‘put together’ in a very specific order; but if you put something out of that order, you spoil it”

2.3.2.1.1.2 SET 2

In the second set of answers there are also 7 PVs containing light verbs and 8 PVs containing heavy verbs. There were **12** topological answers, **2** compositional answers and **1** misinterpretation. Topological answers occurred more among the PVs with light verbs (L 7/7

vs. H 5/8), while compositional answers occurred primarily among the PVs with heavy verbs (L 0/7 vs. H 2/8). The 1 misinterpretation occurred with a PV with a heavy verb – *call out*.

The first 5 PVs include 3 PVs with light verbs and 2 with heavy verbs.

In the answer for *go out* ('stop being fashionable'), the participant uses a *catwalk scenario* – “people who walk along the catwalk are fashionable but those who go out are not fashionable”. The verb is used to explain the particle. This is a **topological answer**.

In the answer for *pull in* ('move to the side of the road to stop'), the participant uses the verb to explain the particle – “you pull your vehicle in the area of the road where you're allowed to stop”. This is a **topological answer**.

In the answer for *call out* ('ask somebody to come and help you when there is an emergency'), there is an *accident scenario*. However, the participant does not say that you call outside of where you are but – “you call somebody (who is in the house) out to help you”. In this case this is not the correct meaning of *out*. Thus, this is a **misinterpretation**.

In the answer for *take in* ('deceive, make somebody believe something that is not true'), the verb is used to explain the particle – “you take somebody in a dark place...so you can deceive them”. This is a **topological answer**.

In the answer for *put out* ('make somebody go to sleep or unconscious'), the participant compares this PV with the first PV of the questionnaire – *go out* ('stop burning') – where a *candle scenario* and *reverse viewing* was used in the drawing. Here there is also *reverse viewing*, but it is not a misinterpretation. The verb is used to explain the particle – you “put somebody's consciousness out of him/her so he/she becomes unconscious”. This is a **topological answer**.

**Here are all 5 of the answers:**

- 16) *go out* ('stop being fashionable') – **TOP** – “people who walk along the catwalk are fashionable, and those who go out are not fashionable”
- 17) *pull in* ('move to the side of the road to stop') – **TOP** – “you pull your vehicle in the area of the road where you're allowed to stop”
- 18) *call out* ('ask somebody to come and help you when there is an emergency') – **MIS** – “let's say you have an accident outside so you call somebody (who is in the house) out to help you”
- 19) *take in* ('deceive, make somebody believe something that is not true') – **TOP** – “you take somebody in a dark place where he/she cannot see a thing so you can deceive them easily”



20) **put out** ('make somebody go to sleep or unconscious') – **TOP** – “the principle is almost the same as with the candle; you put somebody’s consciousness out of him/her so he/she becomes unconscious”

The next 5 PVs include 3 PVs with heavy verbs and 2 PVs with light verbs.

In the answer for **draw in** ('become dark earlier as winter approaches'), the participant personifies the winter – “bad winter draws the sun in or behind the mountains and then it is dark outside”. There is the *in* vs. *out* juxtaposition. The verb is used to explain the particle. This is a **topological answer**.

In the answer for **shut out** ('refuse to allow a person to share your thoughts, feelings etc. '), the participant uses a *head scenario* and the *in* vs. *out* juxtaposition – “when a person shares your thoughts you allow him/her to dig all over your head”. But then “when you refuse to do so, you shout [sic] that person’s fingers out from your head”. The verb is used to explain the particle. This is a **topological answer**.

In the answer for **call in** ('send for somebody professional and official'), the participant says that “when you need professional help you call a professional to come into your home, office, etc. and help you”. First the verb is explained and then another verb is used to explain the particle. This is a **compositional answer**.

In the answer for **put out** ('broadcast, publish or issue'), the participant uses the *in* vs. *out* juxtaposition – “the public cannot see something you want to publish, if that is closed in a, for example, safe”, which is why “you have to put it out and allow people to see it”. The verb is used to explain the particle. This is a **topological answer**.

In the answer for **take in** ('understand and absorb something '), the participant uses the verb to explain the particle – “you take something in your head” so that you can “process it and as a result of the process you understand the thing”. This is a **topological answer**.

**Here are all 5 of the answers:**

21) **draw in** ('become dark earlier as winter approaches') – **TOP** – “bad winter draws the sun in or behind the mountains and then it is dark outside”

22) **shut out** ('refuse to allow a person to share your thoughts, feelings etc. ') – **TOP** – “when a person shares your thoughts you allow him/her to dig all over your head; when you refuse to do so, you shout [sic] that person’s fingers out from your head”

23) **call in** ('send for somebody professional and official') – **CMP** – “when you need professional help you call a professional to come into your home, office, etc. and help you”

24) **put out** ('broadcast, publish or issue') – **TOP** – “the public cannot see something you want to publish, if that is closed in a, for example, safe; so you have to put it out and allow people to see it”

25) **take in** ('understand and absorb something') – **TOP** – “you take something in your head in order to process it and as a result of the process you understand the thing”

In the third part of this set, there are 3 PVs with heavy and 2 PVs with light verbs.

In the answer for **cut out** ('stop doing something'), the participant explains what happens “when you stop doing something” and uses the verb to explain the particle – “you cut yourself out from the process of doing that activity”. This is a **topological answer**.

In the answer for **go in** ('be understood'), the participant says that for someone to understand you, you have to go into their head – “when somebody is in the process of understanding you, you are, in a way, going into their head, because that is the place where the action of understanding is going on”. The verb is used to explain the particle. This is a **topological answer**.

In the answer for **put out** ('switch something off'), the participant uses *the switch analogy* – “when you switch a thing off, that thing has to have a switch; so you simply put the switch out of the 'on' position”. The verb is used to explain the particle. This is **topology**.

In the answer for **cut in** ('interrupt somebody's conversation'), the first association is – *cutting*. The participant explains that “a conversation between two people is like a cord which you cut” and then you “place your own 'contribution' to that conversation in the place of the cut”. Another verb is used to explain the particle. This is a **compositional answer**.

In the answer for **break out** ('begin suddenly'), the participant uses the verb to explain the particle and says that “when something begins suddenly, it breaks out from the place where it was before the break-out”. This is a **topological answer**.

**Here are all 5 of the answers:**

26) **cut out** ('stop doing something') – **TOP** – “when you stop doing something, you cut yourself out from the process of doing that activity”

27) **go in** ('be understood') – **TOP** – “when somebody is in the process of understanding you, you are, in a way, going into their head, because that is the place where the action of understanding is going on”

28) **put out** ('switch something off') – **TOP** – “when you switch a thing off, that thing has to have a switch; so you simply put the switch out of the 'on' position”

29) *cut in* ('interrupt somebody's conversation') – **CMP** – “a conversation between two people is like a cord which you cut and place your own ‘contribution’ to that conversation in the place of the cut”

30) *break out* ('begin suddenly') – **TOP** – “when something begins suddenly, it breaks out from the place where it was before the break-out”

#### 2.3.2.1.1.3 SET 3

In the last set of answers there are 6 PVs containing light verbs and 9 PVs containing heavy verbs. There were **8** topological answers and **7** compositional answers. Topological answers occurred more among the PVs with light verbs (L 5/6 vs. H 3/9), while compositional answers occurred primarily with the PVs containing heavy verbs (L 1/6 vs. H 6/9).

The first 5 PVs of this set, include 2 PVs with light and 3 PVs with heavy verbs.

In the answer for *put in* ('spend time or effort doing something'), the participant uses the verb to explain the particle – “when you want to do something successfully, you have to put some time and effort in the action of doing that”. This is **a topological answer**.

In the answer for *draw out* ('make somebody feel less nervous or shy'), the participant uses the *in* vs. *out* juxtaposition – “nervous and shy people prefer staying inside a house” which is why “you have to draw them out and make them feel less nervous and shy”. The verb is used to explain the particle. This is **a topological answer**.

In the answer for *break out* ('escape'), the participant uses the *in* vs. *out* juxtaposition. The first association is to break the door – “if you are captured in a house, you break the door and get out”. Another verb is used to explain the particle. This is **a compositional answer**.

In the answer for *put in* ('elect a political party as the government'), the participant uses the verb to explain the particle – “when you elect a political party as the government you put it in the process of governing”. This is **a topological answer**.

In the answer for *cut out* ('stop working'), the participant uses the verb to explain the particle – “you cut yourself out from the process of working so you stop working”. This is **a topological answer**.

**Here are all 5 of the answers:**

31) *put in* ('spend time or effort doing something') – **TOP** – “when you want to do something successfully, you have to put some time and effort in the action of doing that”

- 32) **draw out** ('make somebody feel less nervous or shy') – **TOP** – “nervous and shy people prefer staying inside a house, so you have to draw them out and make them feel less nervous and shy”
- 33) **break out** ('escape') – **CMP** – “if you are captured in a house, you break the door and get out”
- 34) **put in** ('elect a political party as the government') – **TOP** – “when you elect a political party as the government you put it in the process of governing”
- 35) **cut out** ('stop working') – **TOP** – “you cut yourself out from the process of working so you stop working”

The next 5 PVs include 1 PV with a light verb and 4 PVs with heavy verbs.

In the answer for **take in** ('make a piece of clothing narrower or tighter'), the subjects of the action are “tailors who take the edges of a seam further into a garment” and “make a new seam” – that way “the piece of clothing gets narrower”. The participant uses the verb to explain the particle but also explains the action/process further which is why this is a **compositional answer**.

In the answer for **pull out** ('stop being involved in something'), the participant uses the *in* vs. *out* juxtaposition – “when you are involved in something you are in the thing” but “when you stop being involved in that, you pull out”. The verb is used to explain the particle. This is a **topological answer**.

In the answer for **break in** ('interrupt a conversation'), the participant uses the verb to explain the particle – “when you interrupt a conversation you break in it” but then also uses a synonym for break to explain the action further – you then “tear” the conversation “apart”. This is a **compositional answer**.

In the answer for **write out** ('write something and include all the necessary information'), the first association is to explain the verb *write*. The participant uses the *in* vs. *out* juxtaposition – “you have all the information about something in your head so when you want to write something on a particular subject you get the information out of your head and write it”. Another verb is used to explain the particle. This is a **compositional answer**.

In the answer for **call in** ('make a public request for a product to be returned'), the participant uses the *in* vs. *out* juxtaposition – “a product is somewhere outside” so you have to “call a product” and then “get it in”. Another verb is used to explain the particle. This is a **compositional answer**.

**Here are all 5 of the answers:**

- 36) **take in** ('make a piece of clothing narrower or tighter') – **CMP** – “tailors take the edges of a seam further into a garment, make a new seam – and the piece of clothing gets narrower”
- 37) **pull out** ('stop being involved in something') – **TOP** – “when you are involved in something you are in the thing, and when you stop being involved in that, you pull out”
- 38) **break in** ('interrupt a conversation') – **CMP** – “when you interrupt a conversation you break in it and ‘tare [sic] it apart’”
- 39) **write out** ('write something and include all the necessary information') – **CMP** – “you have all the information about something in your head, and when you want to write something on a particular subject you get the information out of your head and write it”
- 40) **call in** ('make a public request for a product to be returned') – **CMP** – “you call a product which is somewhere outside and you get it in”

In the third part of this set, and in the last 5 answers of the questionnaire, there are 3 PVs with light verbs and 2 PVs with heavy verbs.

In the answer for **put in** ('interrupt'), the participant uses *a well-organized system analogy* and the verb to explain the particle – “when you put a ‘strange’ object into a well-organized system, you interrupt the order of that system”. This is a **topological answer**.

In the answer for **shut out** ('stop something from entering'), the first association is to – “shut the door” and then the participant uses the *in vs. out* juxtaposition – “things/people which/who are out cannot get in”. This is a **compositional answer**.

In the answer for **put out** ('make trouble, problems, extra work'), the participant uses *a set scenario* and includes the meaning – “if you put one component out of a set, you disorder that set and make troubles to that set”. The verb is used to explain the particle and then the meaning itself is mentioned. This is a **topological answer**.

In the answer for **write in** ('write to ask or complain'), there is *a book of complaints scenario* – “when you are in a bar you write your complaints in the book of complaints”. The participant tries to explain both the verb and the particle. If we compare this to the answer for **put in** ('officially make a claim for something'), where someone enters your data in a computer, then we could argue that this *book of complaints* represents an official sphere as well and not just the process of writing or lexical determination. Thus, this is categorized as a **compositional answer**.

And, finally, in the answer for *take out* ('kill somebody'), the participant uses the verb to explain the particle and also *reverse viewing* – “when you take somebody’s life essence out of him/her, you kill them”. This is a **topological answer**.

**Here are all 5 of the answers:**

- 41) *put in* ('interrupt') – **TOP** – “when you put a ‘strange’ object into a well-organized system, you interrupt the order of that system”
- 42) *shut out* ('stop something from entering') – **CMP** – “you shut the door and things/people which/who are out cannot get in”
- 43) *put out* ('make trouble, problems, extra work') – **TOP** – “if you put one component out of a set, you disorder that set and make troubles to that set”
- 44) *write in* ('write to ask or complain') – **CMP** – “when you are in a bar you write your complaints in the book of complaints”
- 45) *take out* ('kill somebody') – **TOP** – “when you take somebody’s life essence out of him/her, you kill them”

#### **2.3.2.1.1.4 Discussion and Conclusions: Questionnaire 1 – verbal answers**

Most of the answers in this questionnaire were topological (**22/45**) and compositional (**20/45**). There were **0** lexical answers, **0** paraphrases, and **3** misinterpretations.

Topology was present in all three parts of the questionnaire. However, it was most common in the second and third part of the questionnaire (2/15; 12/15; 8/15) and it occurred more with the PVs containing light verbs (L 2/7 vs. H 0/8; L 7/7 vs. H 5/8; L 5/6 vs. H 3/9). Also, topology occurred more with the particle *out* (*in* 9/23 vs. *out* 13/23 → *in* 1/3 vs. *out* 1/3; *in* 5/12 vs. *out* 7/12; *in* 3/8 vs. *out* 5/8).

Compositionality was also present in all three parts of the questionnaire. However, it was more common for the first and last part of the questionnaire (11/15; 2/15; 7/15) and it occurred more with the PVs containing heavy verbs (L 3/7 vs. H 8/8; 0/7 vs. 2/8; L 1/6 vs. 6/9). Also, compositionality occurred more with the particle *in* (*in* 12/18 vs. *out* 8/18 → *in* 6/10 vs. *out* 5/10; *in* 2/2 vs. *out* 0/2; *in* 4/6 vs. *out* 3/6).

There were no lexical answers, while misinterpretations occurred in the first and second part of the questionnaire among both types of PVs (L 2 vs. H 1) but primarily with the particle *out* (*in* 2/7 vs. *out* 0/8; *in* 0/7 vs. *out* 1/8; //).

Taking all of this into consideration, we can say that there is a *topological shift* occurring in the second part of the questionnaire. At first, most of the answers are compositional and then they become more and more topological as the questionnaire

progresses. However, topology is still more common with the PVs containing light verbs and the particle *out*, while compositionality is more common with the PVs containing heavy verbs and the particle *in*.

### 2.3.2.1.2 Pictorial representations: Questionnaire 1

In the pictorial representations, there were **14** topological drawings, **22** compositional drawings, **3** lexical drawings, **3** visual paraphrases and **3** misinterpretations.

To be more precise, topology was more typical for the PVs containing light verbs (L 12/20 vs. H 2/25), while compositionality occurred more with the PVs containing heavy verbs (L 5/20 vs. H 17/25). Lexical determination occurred only with the PVs containing heavy verbs (L 0/20 vs. H 3/20), and misinterpretations were more typical for the PVs containing light verbs (L 2/20 vs. H 1/25).

For the analysis to be clearer, the questionnaire was divided into **3 sets of drawings** – each containing **15 drawings**. Each set was then separated into **groups of 5**.

The participant did not write much in the drawings but tried to show us more. Some drawings included a textual explanation of a certain part of the drawing to make sure we understood what was meant to be shown, but that did not include the verb or the particle.

#### 2.3.2.1.2.1 SET 1

In the first set of drawings there are 7 PVs containing light verbs, and 8 PVs containing heavy verbs. There were **3** topological drawings, **7** compositional drawings, **2** lexical drawings, **1** visual paraphrase, and **2** misinterpretations. Topological answers occurred more with the PVs containing light verbs (L 2/7 vs. H 1/8), while compositional answers occurred primarily with the PVs containing heavy verbs (L 2/7 vs. H 5/8). Lexical drawings occurred with the PVs containing heavy verbs – *break in* and *draw out*, while visual paraphrases occurred among 1 PV containing a light verb – *put in*. Misinterpretations occurred with the PVs containing light verbs – *go out* and *put out*.

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the drawing of ***go out*** (‘stop burning’), there is a *candle scenario* and there are the *before* and *after* images. In the first one, the candle is burning, and an arrow is *going out of its centre* – denoting that *something is going out of the fire*. In the second image, the candle is no longer burning. This is *reverse viewing* and it is a **misinterpretation**.

In the drawing of ***break in*** (‘wear something until it is comfortable’), there are again the *before* and *after* images. In the first one, there is a *person wearing a shirt* and at the collar, in the middle and the bottom of the shirt, and also in the middle of the left sleeve, there are

arrows pointing towards *the left and right side*, denoting – *breaking*. However, there is no – *in* here. In the second image, we can see that *the shirt* is wider, and the person feels *comfortable*. Because the particle is not visible, this is a **lexical drawing**.

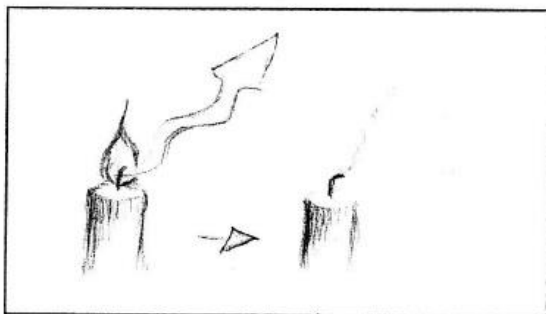
In the drawing of **take out** (‘obtain an official document or a service’), there is an *arrow going out of a cabinet drawer towards a document* that is now – *out*. Another arrow points from the document towards a *person who is now holding the document* – this is *take*. This is a **compositional drawing**.

In the drawing of **call in** (‘make a short visit, usually on the way to another place’), there is a *person going into a house*. Above the person’s head there is a *speech bubble* with “Hey, Joe!” written in it. An arrow is pointing towards *the door of the house* – *in*. The house has “Joe’s place” written on it and in the window – there is *Joe*. A speech bubble represents – *call*, and the arrow represents the direction – *in*. This is a **compositional drawing**.

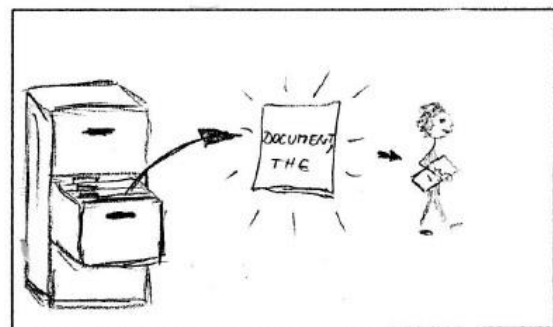
And in the drawing of **put out** (‘injure your back, shoulder, hip etc.’), there are again the *before and after* images. In the first one, there are *2 bones* and there are numbers written on each one - *bone 1 is in the bone 2*. The participant put a circle around *bone 1* and there is an arrow going from *bone 1 out of the circle* to denote that *the bone is going out of its place*. In the next image, bones are now separated. There is no *put* here. This is **topology**.

**Here are all 5 of the drawings:**

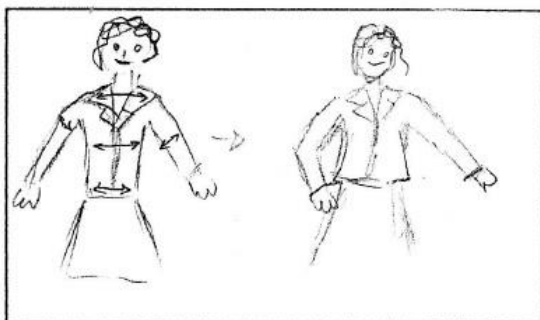
1) **go out** (‘stop burning’) – **MIS**



3) **take out** (‘obtain an official document or a service’) – **CMP**

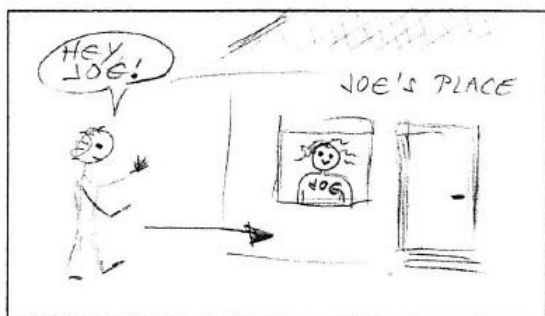


2) **break in** (‘wear something until it is comfortable’) – **LEX**

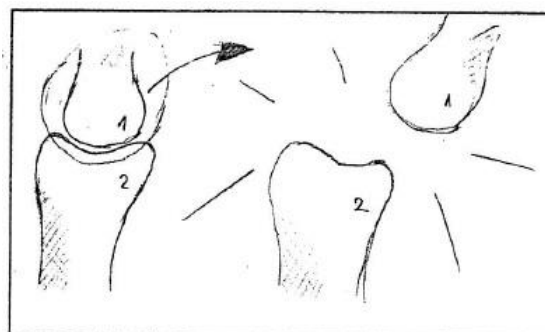




- 4) **call in** ('make a short visit, usually on the way to another place') – **CMP**



- 5) **put out** ('injure your back, shoulder, hip etc.') – **TOP**



The second 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

The drawing of **go in** ('become hidden') includes *a person going into a tent*. There is *an arrow pointing from the person towards the entrance of the tent – in*. Dark is visible inside the tent. The arrow also represents *motion – go*. This is a **compositional drawing**.

In the drawing of **put out** ('extinguish, stop from burning'), there is *a fire and in it a box with "the thing" written on it – it is what makes it burn*. "The thing" is *going out of the fire – an arrow points towards out*. Now that it is on *the outside, smoke* is coming out of "the thing" – *it stopped burning*. There is no *put* here. However, this is *reverse viewing* of what happens when something *extinguishes* just like in drawing no. 1 – *go out* ('stop burning'). Thus, this is a **misinterpretation**.

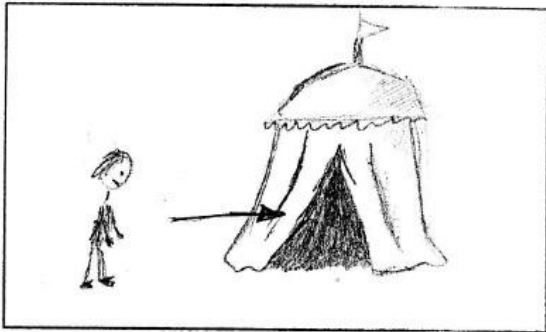
The drawing of **pull in** ('attract people in large numbers') includes *a group of people in a fishnet being pulled like fish into a house*. The *fishnet rope* is also an arrow pointing towards *the door of "the party house"* (it is written on the house). *Musical notes* fill the air around the house and around the rope and they indicate that *the music is attracting people into the house*. This is a **compositional drawing**.

In the drawing of **cut out** ('prevent something from reaching somewhere'), there is *a ball of ants going down a path towards a jar of honey* and an arrow showing us the direction of their movement. Then, in the middle of the path, there is *a straight line* on each side of the ball of ants denoting – *a cut* and *an arrow towards up* which denotes – *out*. They are *cut out of their path*. This is a **compositional drawing**.

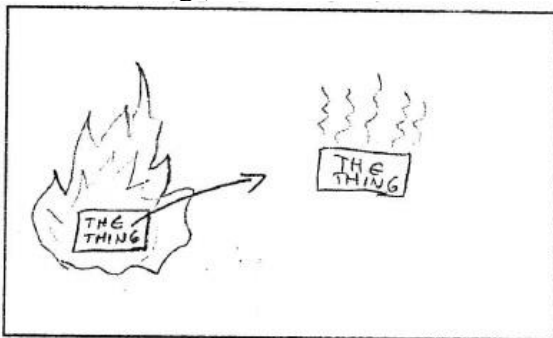
In the drawing of **put in** ('officially make a claim for something'), there is *a computer scenario*. *Somebody is typing a claim on their computer – only the hands* are visible. On the computer screen there is the following text: "the claim for...". The fact that it is done on a computer makes it *official*. However, there is no *put* or *in* here. What is visible is 'officially make a claim for something'. This is a **visual paraphrase**.

Here are all 5 of the drawings:

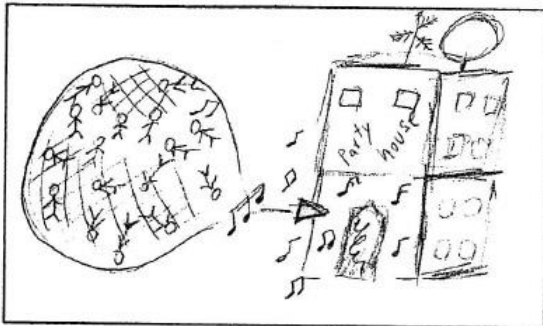
6) *go in* ('become hidden') – **CMP**



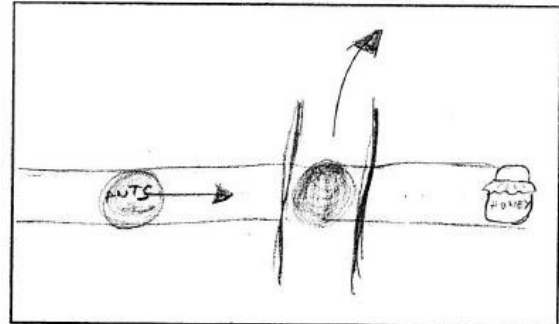
7) *put out* ('extinguish, stop from burning') – **MIS**



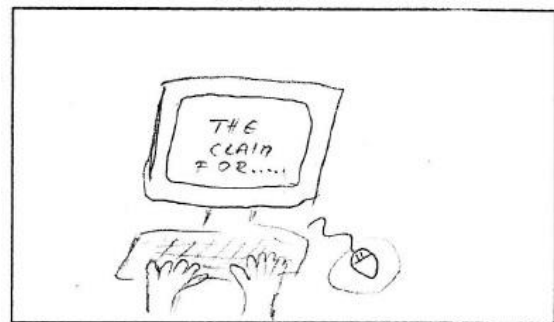
8) *pull in* ('attract people in large numbers') – **CMP**



9) *cut out* ('prevent something from reaching somewhere') – **CMP**



10) *put in* ('officially make a claim for something') – **PPH**



The third part of this set includes 4 PVs with heavy and 1 PV with a light verb.

In the drawing of *break out* ('become covered in something, like in sweat or rash'), *drops of sweat are coming out of the skin to the skin surface*. There are 10 arrows going from under the skin out of it. On each arrow, we can see "a drop of sweat" (it is written in the drawing) and its journey – where it was before coming out and that it is now on "the skin surface" (it is written in the drawing). There is no *break* here. This is a **topological drawing**.

For *shut in* ('trap or injure something by closing something tightly around it'), the first association is drawing *a door*. In this case, there is *a hand shutting the door* but *the hand* is placed on the edge of the door and *it is going to get injured*. There is *an arrow* towards the other side of the door, it is going – *in*. Thus, this is a **compositional drawing**.

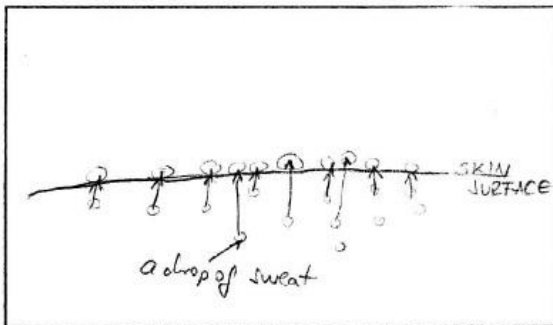
In the drawing of **draw out** ('make something last longer'), there are 2 images. In the first one, there is *a ball of something*. An arrow is pointing from that image to the other one. In the second image, that *something* is now in a straight line – *longer*. There is an arrow with direction on both ends, towards *the left* and *the right* – this is *draw*. The arrow between the 2 images does not represent *out*, the only thing we can see are the *before* and *after* images. Thus, this is a **lexical drawing**.

In the drawing of **break in** ('get somebody accustomed to something new'), the participant gives us a very specific image – *a doll in a bottle scenario* and the *before* and *after* images. In the first one, *a doll is going into an opened bottle through its neck*. There is an arrow pointing towards – *in*. In the second image, *the doll is in the bottle* but it is *broken into parts*. The bottle is now shut. Each image represents one part of this PV. Thus, this is a **compositional drawing**.

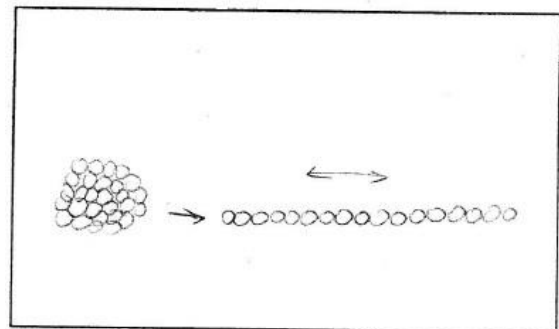
And, in the drawing of **put out** ('make a figure or a result wrong'), there are also the *before* and *after* images of *a board-like system filled with 25 fields*. In the first image, one part of the system is going *out*. There is an arrow towards – *out*. In the next image, that space in the board-like system is *empty*. There is no *put* here. This is a **topological drawing**.

**Here are all 5 of the drawings:**

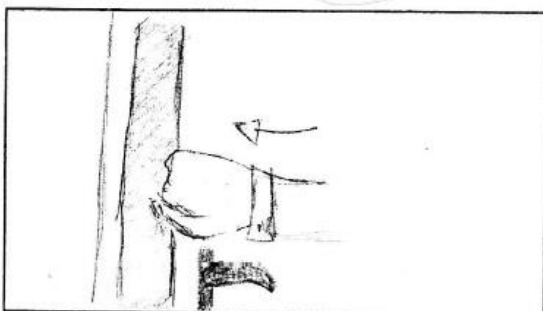
11) **break out** ('become covered in something, like in sweat or rash') – **TOP**



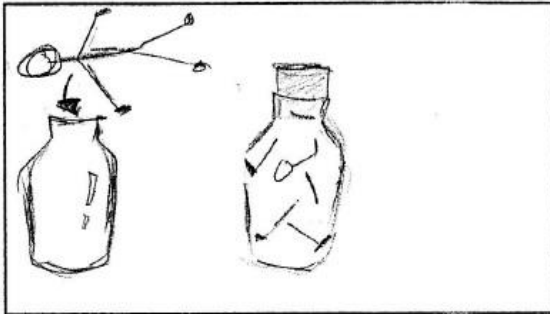
13) **draw out** ('make something last longer') - **LEX**



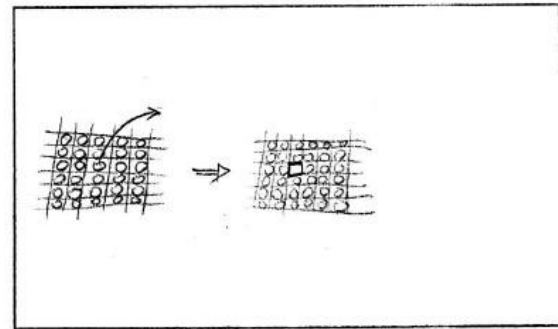
12) **shut in** ('trap or injure something by closing something tightly around it') – **CMP**



14) **break in** ('get somebody accustomed to something new') – **CMP**



15) **put out** ('make a figure or a result wrong') – **TOP**



#### 2.3.2.1.2.2 SET 2

In the second set of drawings there are also 7 PVs with light verbs and 8 PVs with heavy verbs. There were **5** topological drawings, **8** compositional drawings, **1** visual paraphrase, and **1** misinterpretation. Topological answers occurred only among the PVs with light verbs (L 5/7 vs. H 0/8), while compositional answers occurred primarily among the PVs with heavy verbs (L 2/7 vs. H 6/8). The 1 visual paraphrase occurred only with the heavy verb – *shut out*. The 1 misinterpretation occurred with a PV containing a heavy verb – *call out*.

The first 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

In the drawing of **go out** ('stop being fashionable'), there is a *catwalk scenario* – “the catwalk” is denoted as “a fashionable” zone and the space outside of it as “non-fashionable”. A person is walking along the catwalk and then s/he *goes out of it*. An arrow points towards – *out* but it also denotes motion. This is a **compositional drawing**.

In the drawing of **pull in** ('move to the side of the road to stop'), there is a *car being pulled into the side of the road*. A rope attached to the car is also *the arrow* showing us the direction of the movement – *in*. There is an “X” written in the side of the road, presumably denoting where the car should be. This is a **compositional drawing**.

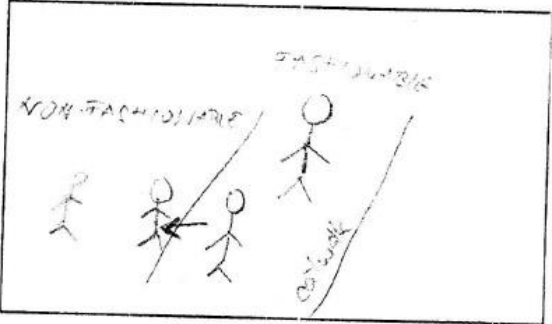
In the drawing of **call out** ('ask somebody to come and help you when there is an emergency'), there is a *person standing next to a broken bike*, and a *speech bubble* is coming out of his/her mouth saying – “Aaa”. There is also a *house with a person in the window*, and an *arrow* pointing from the person in the house towards *the outside*. If we looked at the drawing without knowing which PV was supposed to be in it, we would assume it was about a PV *go out*. If there was no arrow going *out of the house*, we would consider this drawing to be a visual paraphrase. However, it is clear the participant tried to show us the particle *out*, but misunderstood the meaning of this PV. Thus, this is a **misinterpretation**.

In the drawing of **take in** ('deceive, make somebody believe something that is not true'), there is a *person in a bubble* and an *arrow* going from the person towards *the door* of some kind of a *building* – this is *in*. There is no *take* or *deceive* here. This is **topology**.

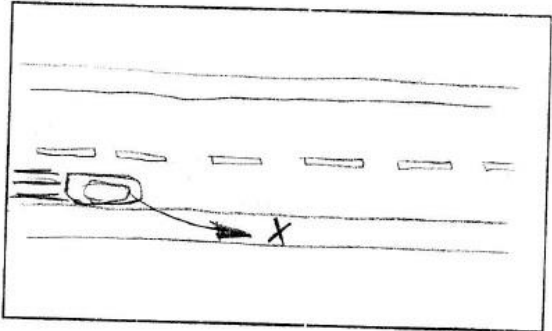
In the drawing of **put out** ('make somebody go to sleep or unconscious'), there are three images of a *person*. In the first one, a part of the person's head is denoted as – "consciousness". In the second one, a *person's consciousness is going out of his/her head* (arrow towards – *out*) – this is *reverse viewing*. In the third one, the person is now *asleep* – there are "zzzz" written above his/her head. There is no *put* here. This is **topology**.

**Here are all 5 of the drawings:**

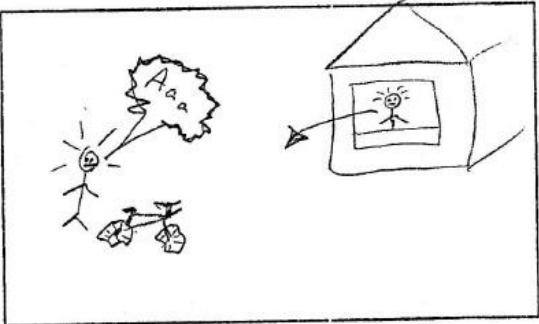
16) **go out** ('stop being fashionable') – **CMP**



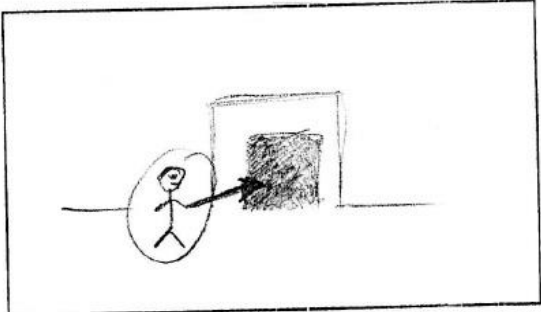
17) **pull in** ('move to the side of the road to stop') – **CMP**



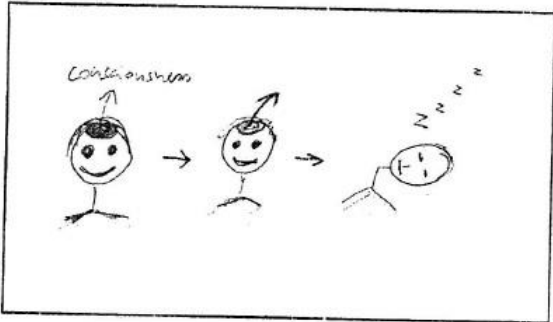
18) **call out** ('ask somebody to come and help you when there is an emergency') – **MIS**



19) **take in** ('deceive, make somebody believe something that is not true') – **TOP**



20) **put out** ('make somebody go to sleep or unconscious') – **TOP – R**



The second 5 PVs include 3 PVs with heavy verbs and 2 with light verbs.

In the drawing of **draw in** ('become dark earlier as winter approaches'), there are 2 images. In the first one *the sun is shining above the mountains* and "the winter" is personified. In the second image, *the winter is drawing the sun into the mountains*. It is doing that with its *hands*. This is a **compositional drawing**.

In the drawing of **shut out** ('refuse to allow a person to share your thoughts, feelings etc. '), there are 2 images. In the first one, *a hand is digging over a person's open head* and an *arrow* is showing us that *the lid of the head* is in the process of *shutting*. The person is not happy about this. In the second image, *the lid of the person's head* is *shut* and the person is now wearing a smile. The hand that was doing the action is now out of the head and cannot get in. However, the only thing we see is the *before* and *after* images and the process of *shutting*. There is no direction towards *out* but because of the ambiguity we cannot claim we only see *shut*. Thus, this is categorized as a **visual paraphrase**.

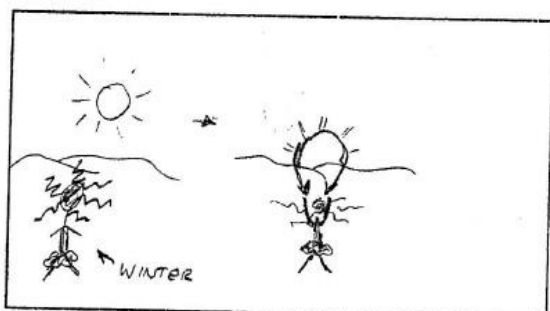
The drawing of **call in** ('send for somebody professional and official') includes *a person inside a house* and *a speech bubble* with– "Hey pro!" coming out of the person's mouth (*call*). *A second person* is *on the outside* and s/he is *going into the house*. *An arrow* going towards *the door* of the house denotes – *in*. This is a **compositional drawing**.

In the drawing of **put out** ('broadcast, publish or issue'), there is *a box* with *a stack of something* (probably newspapers) *in it* and an arrow going *out of it*. The arrow is pointing to the *stack of something* that is now *outside* surrounded by *four pairs of eyes* that are *looking at it*. Each pair of eyes is *wearing a smile*. The participant is showing us what happens when something is 'broadcast/published/issued'. This is a **topological drawing**.

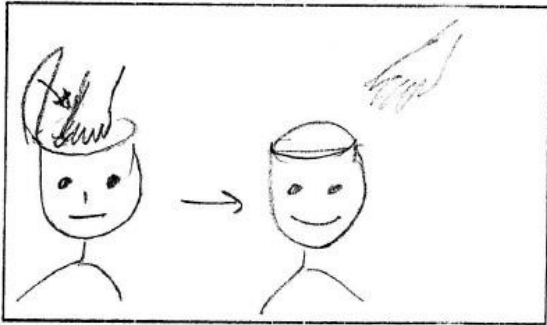
The drawing of **take in** ('understand and absorb something') includes *something going into a person's head*. There is *an arrow* pointing from *something in a circle* towards *the person's head*. There is no *take* here. This is a **topological drawing**.

**Here are all 5 of the drawings:**

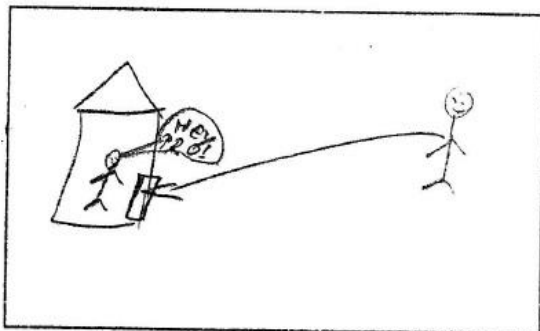
21) **draw in** ('become dark earlier as winter approaches') – **CMP**



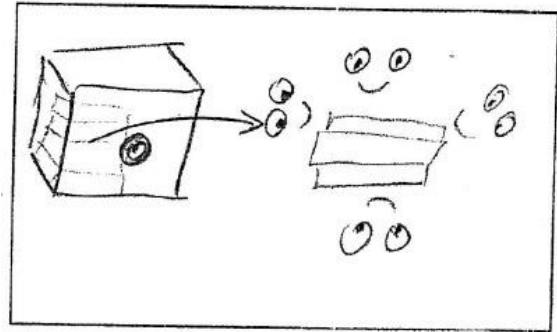
22) **shut out** ('refuse to allow a person to share your thoughts, feelings etc.') – **PPH**



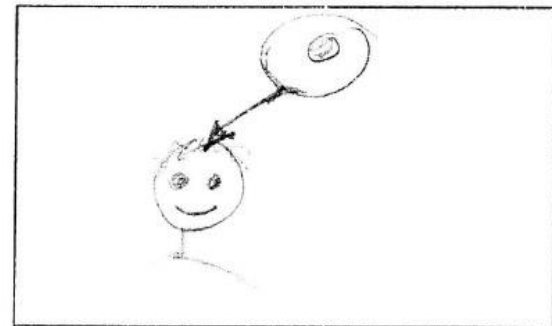
23) **call in** ('send for somebody professional and official') – **CMP**



24) **put out** ('broadcast, publish or issue') – **TOP**



25) **take in** ('understand and absorb something') – **TOP**



The third part of this set includes 3 PVs with heavy verbs and 2 PVs with light verbs.

In the drawing of **cut out** ('stop doing something'), there are the *before* and *after* images. In the first one there is a *large arrow* with "you doing something" written on it, showing us *an action happening*. There are 2 *zig zag arrows* on each side of "you doing something" pointing towards – *out*. Those *zig zag lines* denote the process of *cutting*. In the second image, the action continues without you – "you doing something" is now outside, *you stopped doing it*. This is a **compositional drawing**.

In the drawing of **go in** ('be understood'), there are *two people* pictured and *an arrow* going from one person's head to the other person's head. Also, there is a *miniature person walking along that arrow* and in front of him/her there is another *arrow* pointing in the same direction as the main one. The main arrow represents – *in* and the miniature person represents *go*. The person now understands you. This is a **compositional drawing**.

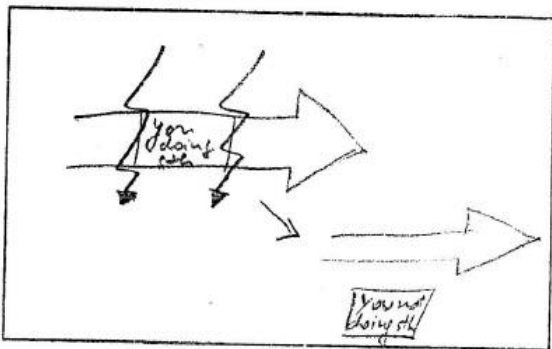
In the drawing of **put out** ('switch something off'), there are 2 images of a *switch* with "on" and "off" visible. In the first one, *the on position* is in black colour and *the off position* is grey. There is an arrow going *out of the on position* and *into the off position*. In the second image, the on position is now grey, and the off position is black – *something was switched off*. There is no *put* visible. This is a **topological drawing**.

The drawing of **cut in** ('interrupt somebody's conversation') includes 2 *people having a conversation*. Their conversation is denoted by a *line* going from one person's mouth to the other person's mouth. A third person *interrupts their conversation* – his/her speech goes into the line of that conversation. This speech is shown by a *zig zag arrow* towards – *in*. The *zig zag arrow* also denotes – *cut*. This is a **compositional drawing**.

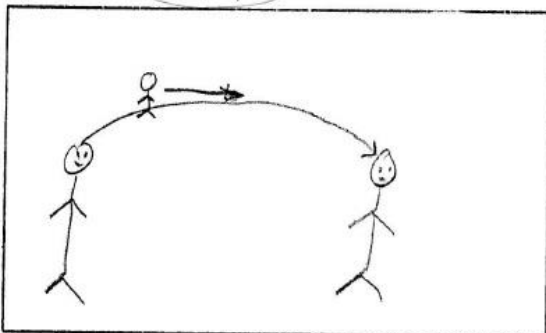
In the drawing of **break out** ('begin suddenly'), there are the *before* and *after* images. In the first one, there is a *circle* denoted as "the thing" and 3 *arrows* are going out of it. In the second image, "the thing" is now *out* – it *began suddenly*. "The thing" now looks like an arrow – this is the action that will continue. The circle it was in is *broken*. This is a **compositional drawing**.

Here are all 5 of the drawing:

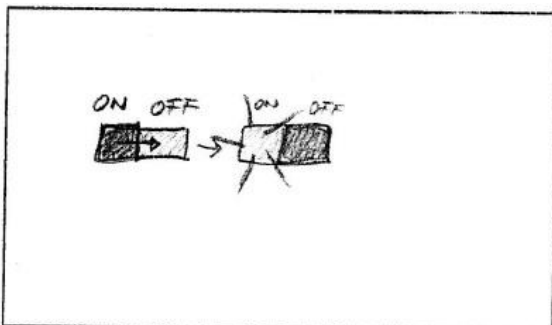
26) **cut out** ('stop doing something') – **CMP**



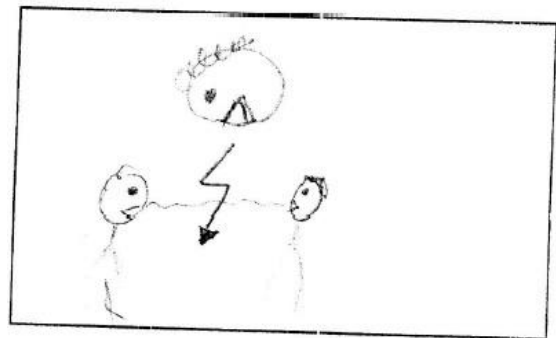
27) **go in** ('be understood') – **CMP**



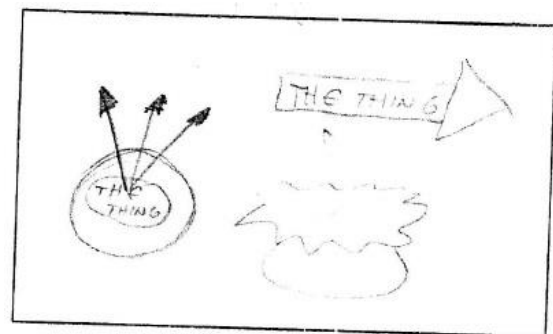
28) **put out** ('switch something off') – **TOP**



29) **cut in** ('interrupt somebody's conversation') – **CMP**



30) **break out** ('begin suddenly') – **CMP**





### 2.3.2.1.2.3 SET 3

In the third set of drawings there are 6 PVs containing light verbs and 9 PVs containing heavy verbs. There were **6** topological drawings, **7** compositional drawings, **1** lexical drawing, and **1** paraphrase. Topological answers occurred more with the PVs containing light verbs (L 5/6 vs. H 1/9), while compositional answers occurred primarily with the PVs containing heavy verbs (L 1/6 vs. H 6/9). The 1 lexical answer occurred with a PV containing a heavy verb – *write in*, as well as the 1 visual paraphrase – *shut out*.

The first 5 PVs of this set include 2 PVs with light verbs and 3 PVs with heavy verbs.

In the drawing of ***put in*** ('spend time or effort doing something'), *time* and *effort* are going *into something*. There is *a circle* with "time" and "effort" in it and an arrow pointing from that circle and going *into a bigger circle – in*. There is no *put* here. This is **topology**.

The drawing of ***draw out*** ('make somebody feel less nervous or shy') includes *a person drawing another person out of a house*. There is *an arrow* going from the person inside the house to the *outside* of the house. The person on the outside is *pulling* the arrow *to draw the person out of the house*. This is **a compositional drawing**.

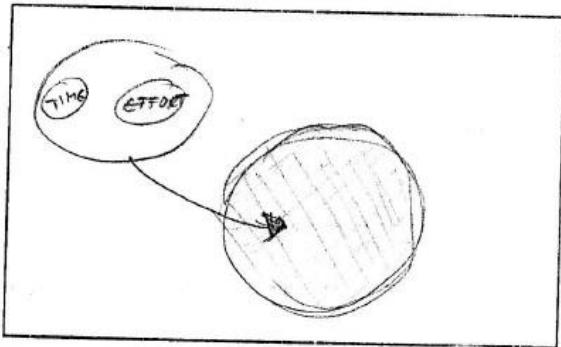
The drawing of ***break out*** ('escape') includes *a person breaking the door to get out/escape*. The person is *breaking* "the door" using *an axe* and there is an arrow going *out* through the door at the point of breakage. This is **a compositional drawing**.

In the drawing of ***put in*** ('elect a political party as the government'), there is *a party going into the process of governing*. "The party" is in *a circle* and there is *an arrow* going from that circle *into a large arrow* representing "the process of governing". The party is now *in* the process of governing. This is **a topological drawing**.

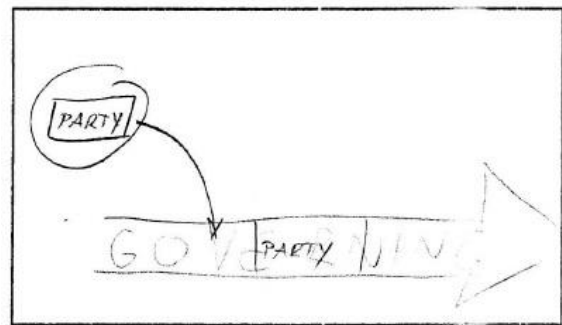
The drawing of ***cut out*** ('stop working') includes the *before* and *after* images. In the first one, there is *a circle* denoted as "the work" and *a triangle in it* denoted as "you working". In the second image, *the triangle is going out of* "the work". There are 2 arrows pointing *out* of the circle. The triangle is now denoted as "you not working". This is a very specific image – *cut* is represented by *the triangle*, it is implied. Thus, this is **a compositional drawing**.

Here are all 5 of the drawings:

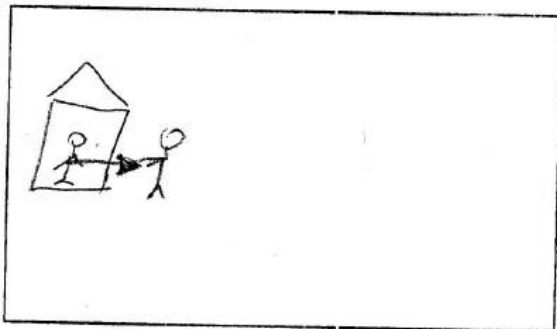
31) **put in** ('spend time or effort doing something') – TOP



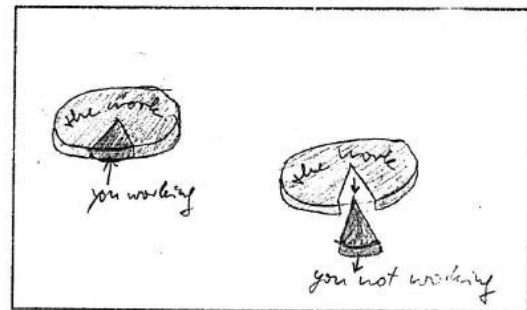
34) **put in** ('elect a political party as the government') – TOP



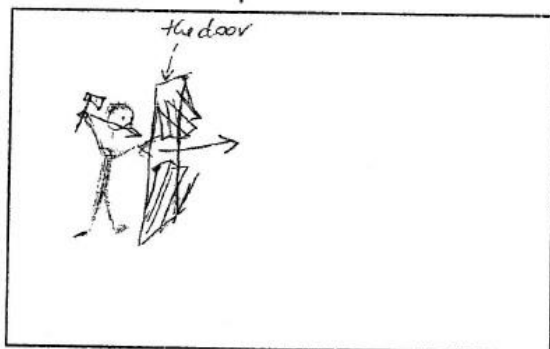
32) **draw out** ('make somebody feel less nervous or shy') – CMP



35) **cut out** ('stop working') – CMP



33) **break out** ('escape') – CMP



The second part of this set includes 1 PV with a light and 4 PVs with heavy verbs.

In the drawing of **take in** ('make a piece of clothing narrower or tighter'), *the seam of a cloth is going into a new seam*. There are the *before* and *after* images. In the first one, the cloth is divided by a *straight line* into two equal parts. On each side of the straight line, there are *dashed lines* representing the old "seam". *Arrows* are going from the old seam *into* the new one. In the second image, the cloth is now *narrower*. There is no *take* here. This is a **topological drawing**.

In the drawing of ***pull out*** ('stop being involved in something'), there is a *large arrow* with 5 *people* in it. The *arrow* represents some kind of a process. The participant circled *the person* in the middle and there is *an arrow* going from it towards *out – out of the process*. The person is now *out*. There is no person doing *the pulling*, only the particle is visible. Thus, this is a **topological drawing**.

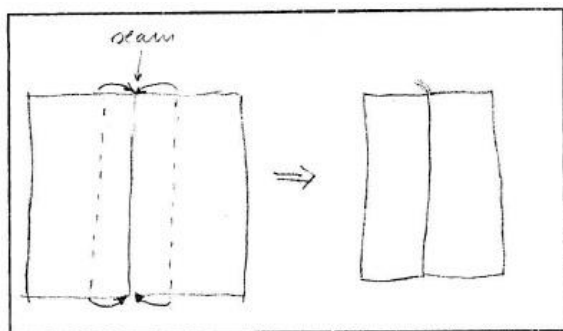
In the drawing of ***break in*** ('interrupt a conversation'), there are the *before* and *after* images. In the first one, *a person is going into a conversation*. *The conversation* is represented by *a puddle-like mass*, and there is *an arrow* going from the person towards "the conversation" – *in*. In the second image, "the conversation" is *broken* into 2 parts and the person is now *in-between*. The first image stands for the particle - *in* and the second one represents the verb - *break*. This is a **compositional drawing**.

In the drawing of ***write out*** ('write something and include all the necessary information'), *a person is writing the information out of his/her head*. *The person* is seated and *s/he is writing something on a piece of paper*. "Information" is in the person's head and there is *an arrow* going from "the information", *out of the head and into the person's hand/process of writing/the paper*. Both the verb and the particle are visible. This is a **compositional drawing**.

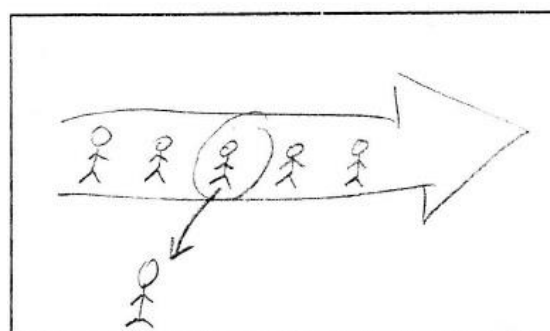
In the drawing of ***call in*** ('make a public request for a product to be returned'), *a person is calling a product in* and the *before* and *after* images are included. In the first one, *a bunch of products are out* and there is *a speech bubble* with *one of the products* going into the person's mouth – *an arrow* is showing us the direction. It seems as though the person is *calling* the product *into his/her mouth*. In the next image, the person is holding the product and is in a separate place – *in*, while the other products are still *out*. This is a **compositional drawing**.

**Here are all 5 of the drawings:**

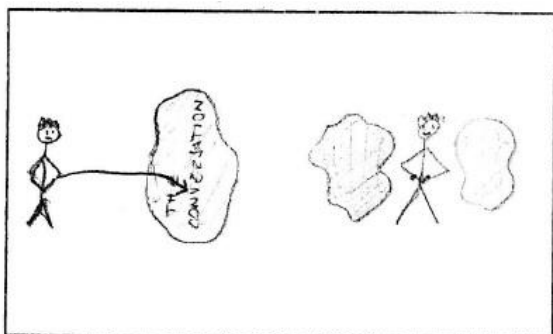
36) ***take in*** ('make a piece of clothing narrower or tighter') – **TOP**



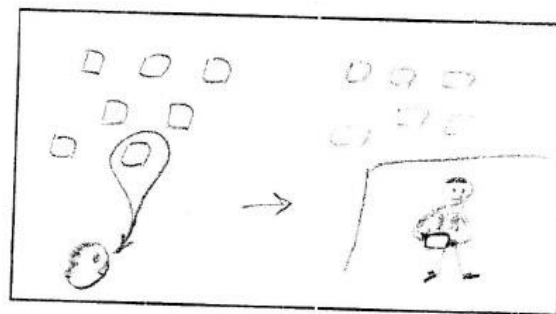
37) ***pull out*** ('stop being involved in something') – **TOP**



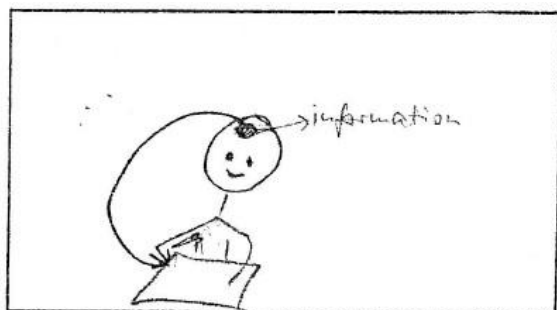
38) **break in** ('interrupt a conversation') – **CMP**



40) **call in** ('make a public request for a product to be returned') – **CMP**



39) **write out** ('write something and include all the necessary information') – **CMP**



In the third part of this set, and in the last 5 drawings of the questionnaire, there are 3 PVs containing light verbs and 2 PVs containing heavy verbs and they switch back and forth.

In the drawing of **put in** ('interrupt'), there is a *board-like system* with only *the dots* visible in it and the *before* and *after* images. In the first one, *an asterisk* is going into the system – *an arrow* going from the asterisk and pointing into the system is showing us the direction. In the second one, *the asterisk* is in the system and the system is now *interrupted*. There is no *put* here. The drawing is similar to the drawing no. 15 – *put out*. This is a **topological drawing**.

In the drawing of **shut out** ('stop something from entering'), there is a *house* and a *person in it*. On the other side of the *door*, there are 4 *people* and they cannot get in. What is visible is the *in vs. out* juxtaposition but no direction from one sphere to the other so this is not a compositional drawing. It is also not lexical because the process of *shutting* is not visible. The only thing that is visible is that *people are stopped from entering*. Thus, this is a **visual paraphrase**.

In the drawing of **put out** ('make trouble, problems, extra work'), there are the *before* and *after* images of some kind of a *system*. In the first one, *a part of the system* is circled, and

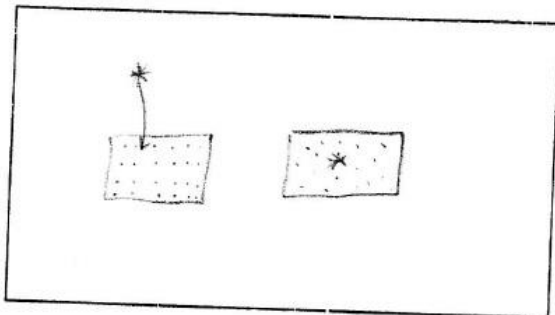
it is going *out of the system* – an arrow towards *out* is showing us the direction. The part is now *out*. In the second image, the place where it was is *empty* and the participant drew *lines* around it to emphasize the *emptiness*. The part of the system that went out is next to it again, like in the previous image – to emphasize again it is *out*. There is no *put* visible. What is important is that something went – *out*. This is a **topological drawing**.

In the drawing of **write in** ('write to ask or complain'), there is a *person writing a complaint into a book of complaints*. The particle is not visible, just the process of *writing* is. This is a **lexical drawing**.

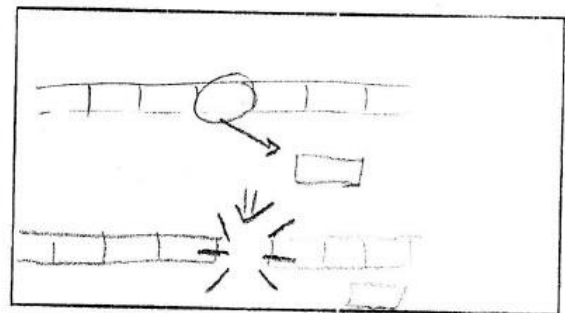
In the drawing of **take out** ('kill somebody'), there are the *before* and *after* images. In the first one, a *person is taking another person's life essence out of his/her body*. "Life essence" is denoted at *the centre of the person's body* and there is an arrow towards – *out*. The person doing the action is using *his/her hands* to *take the life essence out*. In the second image, the person is now *dead* because the other person *killed him/her*. This is a **compositional drawing**.

Here are all 5 of the drawings:

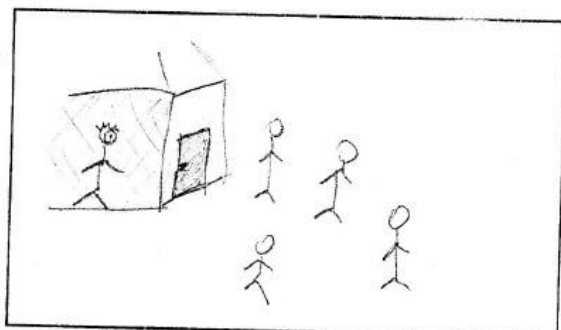
41) **put in** (interrupt) – TOP



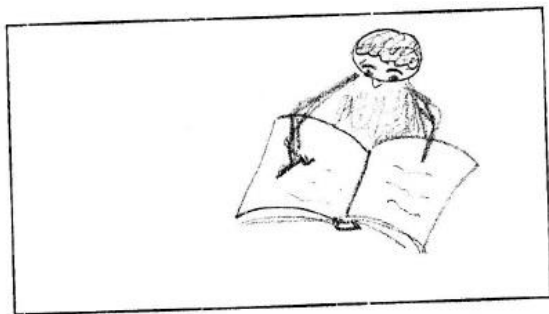
43) **put out** ('make trouble, problems, extra work') – TOP



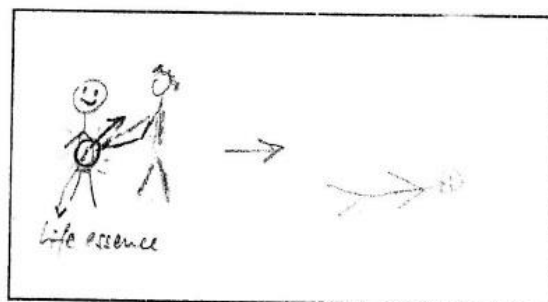
42) **shut out** ('stop something from entering') – PPH



44) *write in* ('write to ask or complain') – **LEX**



45) *take out* ('kill somebody') – **CMP**



#### 2.3.2.1.2.4 Discussion and Conclusions: Questionnaire 1 – pictorial representations

Most of the drawings in this questionnaire were topological (14/20) and compositional (22/45). However, unlike in the verbal answers where topology was predominant, here there was more compositionality. There were 3 lexical drawings, 3 visual paraphrases, and 3 misinterpretations.

Topology was present in all three parts of the questionnaire. However, it was most common in the second and third part of the questionnaire (3/15; 5/15; 6/15) and it occurred almost only with the PVs containing light verbs (L 2/7 vs. 1/8; L 5/7 vs. H 0/8; L 5/6 vs. H 1/9). Also, topology occurred slightly more with the particle – *out* (*in* 6/14 vs. *out* 8/14 → *in* 0/3 vs. *out* 3/3; *in* 2/5 vs. *out* 3/5; *in* 4/5 vs. *out* 2/5), but not as noticeably as in the verbal answers.

Compositionality was also present in all three parts of the questionnaire (7/15; 8/15; 7/15) and it occurred more with the PVs containing heavy verbs (L 2/7 vs. H 5/8; L 2/7 vs. H 6/8; L 1/6 vs. H 6/9). Unlike in the verbal answers, where compositionality occurred more with the particle – *in*, here it occurred equally among both (*in* 11/22 vs. *out* 11/22 → *in* 4/22 vs. *out* 3/22; *in* 5/22 vs. *out* 3/22; *in* 2/22 vs. *out* 5/22).

Lexical drawings occurred in the first and last part of the questionnaire and only with the PVs containing heavy verbs (L 0/7 vs. H 2/8; L 0/7 vs. H 0/8; L 0/6 vs. H 1/9). It occurred with the verbs – *break*, *draw*, and *write*. Visual paraphrases occurred in all 3 parts of the questionnaire and slightly more with the PVs containing heavy verbs and the particle *out* (L 1/20 vs. H 2/25) – *put in* and *shut out*. Misinterpretations occurred in the first and second part of the questionnaire slightly more with the PVs containing light verbs (L 2/20 vs. H 1/25) and the particle – *out* (*in* 1 vs. *out* 2).

Taking all of this into consideration, we can say that there is a slight *topological shift* occurring in the second part of the questionnaire and it continues in the third part of the

questionnaire. However, unlike in the verbal answers, here it is visible only with the PVs containing light verbs (L 2/7 vs. 5/7 vs. 5/6). When it comes to the PVs containing heavy verbs, the participant shows tendencies towards compositionality, i.e. drawing both the verb and the particle and that does not change throughout the questionnaire (H 5/8 vs. 6/8 vs. 6/9). The participant also shows tendencies towards lexical determination only when drawing the PVs containing heavy verbs.

### 2.3.2.2 QUESTIONNAIRE 2

This questionnaire was selected because the verbal answers and pictorial representations were mostly compositional, and we wanted to see how the participant went about them and what types of compositional answers were there. The participant was Croatian.

There were **45/45** answers in both verbal and pictorial representations of **Questionnaire 2**.

#### 2.3.2.2.1 Verbal answers: Questionnaire 2

In the verbal answers, there were **3** topological, **40** compositional and **2** misinterpretations. To be more precise, topology was slightly more typical for the PVs containing light verbs than the PVs containing heavy verbs (L 2 vs. H 1) and misinterpretations occurred only with the PVs containing heavy verbs (L 0 vs. H 2).

For the analysis to be clearer, the questionnaire was divided into **3 sets of answers** – each containing **15 answers**. Each set was then separated into **groups of 5**.

According to Geld (2009b: 96):

“In between the two extremes relating to either lexical or topological/grammatical determination, there are a number of intermediate cases involving gradient and partial compositionality”.

Compositional answers are thus categorized into 2 main groups seen in this questionnaire. The first group includes answers where the participant explained the particle with clear spatial topology; and we call this – *full compositionality* (F-CMP). The second group includes answers where the particle was assigned different meanings; and we call this – *partial compositionality* (P-CMP). In some cases, the participant explained the particle using clear topology and by assigning it different meanings as well, but we will not consider this to be a separate category. Further on, we look at whether the participant explained the particle or the verb first and if that depends on the light verb vs. heavy verb difference. We will see whether this changes as the questionnaire progresses.

### 2.3.2.2.1.1 SET 1

In the first set of answers there are 7 PVs containing light verbs, and 8 PVs containing heavy verbs. There was **1** topological answer and **11/14** compositional answers included full compositionality. All **3** cases of partial compositionality included the particle – *out*. The participant explained the particle first in 2 cases only – 1 PV with a light verb and 1 PV with a heavy verb.

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the answer for *go out* ('stop burning'), the participant puts emphasis on the particle by leading with – *out*. *Out* means “to stop, to disappear, to not be present anymore”. *Go* is “the process of fire becoming smaller”. This is **partial compositionality**.

In the answer for *break in* ('wear something until it is comfortable'), the participant starts with the verb – “breaking the shoes’ stiffness until they become softer and tame”. The particle is defined as something happening “from the inside of the shoe”, so this is **full compositionality**.

In the answer for *take out* ('obtain an official document or a service'), the emphasis is again on the verb. First, “somebody goes to an institution to get a particular document...he/she takes it out”. A synonym for *take* is used first – *to get*, and then the verb is used to explain the particle. The participant then explains the verb and the particle separately – *take* means “it is his/hers” and *out* is “out of the institution”. This is **full compositionality**.

In the answer for *call in* ('make a short visit, usually on the way to another place'), the participant starts with the verb – “call somebody...it lasts for a short while” and the same goes for “this type of visit”; while *in* is “going inside the home of the person you are visiting”. This is **full compositionality**.

And in the answer for *put out* ('injure your back, shoulder, hip etc. '), the participant first starts with the context – “to make your joints jump out”. Here the action is explained first by *to make + jump* and further on the verb and the particle are explained separately. In the second part of the answer, *put* is “force” and “stretch yourself” and *out* is also “when the joint is damaged and it becomes swollen”. Because of the first part of the answer, this is **full compositionality**.

**Here are all 5 of the answers:**

- 1) *go out* ('stop burning') – **P-CMP** – “‘out’ – to stop, to disappear, to not be present anymore; ‘go’ – the process of fire becoming smaller and smaller until it extinguishes completely – ‘out’” → **particle first**



- 2) **break in** ('wear something until it is comfortable') – **F-CMP** – “breaking the shoes’ stiffness until they become softer – like breaking somebody’s will so that they listen to you, become tame; ‘in’- from the inside of the shoe; the shoes become wider from the inside” → **verb first**
- 3) **take out** ('obtain an official document or a service') – **F-CMP** – “somebody goes to an institution of some kind to get a particular document so when he/she gets it, he/she takes it out – ‘take’ – it is his/hers, ‘out’ – out of the institution” → **verb first**
- 4) **call in** ('make a short visit, usually on the way to another place') – **F-CMP** – “you call somebody just to hear how they are and what’s new – it last for a short while – the same is with this type of visit; ‘in’ – means going inside the home of the person you are visiting” → **verb first**
- 5) **put out** ('injure your back, shoulder, hip etc.') – **F-CMP** – “to make your joints jump out because you have forced yourself too much, you have played too much sports; ‘put’ – force, stretch yourself; ‘out’ – when the joint is damaged and it becomes swollen” → **verb first**

The second 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

**Topology** is used to explain the first PV – **go in** ('become hidden'). The participant uses the verb to explain the particle – “to go inside a dark place”.

The second light verb – **put out** ('extinguish, stop from burning') – has a similar answer to **go out** ('stop burning'). **Put** is to “put your foot down on something on the ground”, and – “the process of extinguishing”. **Out** means “something stopped, disappeared”. However, the verb is explained first unlike in the first answer of the questionnaire. This is **partial compositionality**.

In the answer for **pull in** ('attract people in large numbers'), the first association is – “pulling a rope”. And **in** is defined as direction – “towards the person or thing that is attractive”. This is **full compositionality**.

In the answer for **cut out** ('prevent something from reaching somewhere') the first association is “cutting paper”, so like “a sudden, harsh movement”. **Out** is – “not included, absent from the place you should have reached”. This is **partial compositionality**.

And In the answer for **put in** ('officially make a claim for something'), **put** is “to put a request on the table”; and **in** – “the institution in which you’re making a request”. This is **full compositionality**.

**Here are all 5 of the answers:**

- 6) **go in** ('become hidden') – **TOP** – “to go inside a dark place, like a basement or a closer, somewhere you cannot see or you cannot be seen (you are hidden)”
- 7) **put out** ('extinguish, stop from burning') – **P-CMP** – “‘put’ – put your foot down on something on the ground; also the process of extinguishing; ‘out’ – something stopped, disappeared” → **verb first**
- 8) **pull in** ('attract people in large numbers') – **F-CMP** – “like the game of pulling a rope, “pull” – means to attract, make somebody come to you because you have power over him/her; “in” – towards the person or thing that is attractive” → **verb first**
- 9) **cut out** ('prevent something from reaching somewhere') – **P-CMP** – “‘cut’ – to make a sudden, harsh movement, like when cutting paper – it is quick and abrupt; ‘out’ – not included, absent from the place you should have reached” → **verb first**
- 10) **put in** ('officially make a claim for something') – **F-CMP** – “‘put’ – to put your request on the table, to make it known so that it can be considered; ‘in’ – the institution in which you’re making a request – the place where you put your claim so that it can be reviewed” → **verb first**

The third part of this set includes 4 PVs with heavy verbs and 1 PV with a light verb. The first answer puts emphasis on the particle. All answers include full compositionality.

In the answer for **break out** ('become covered in something, like in sweat or rash'), *out* is – “out in the open” and *break* is “a sudden, unexpected act”. This is **full compositionality**.

In the answer for **shut in** ('trap or injure something by closing something tightly around it'), the first association is mentioning a door – “close the door”, and *in* is – “inside a place”. This is **full compositionality**.

In the answer for **draw out** ('make something last longer'), the participant uses synonyms for the verb like – “pulling, stretching, making something longer”, and *out* is “the time or space...that sticks out”. This is **full compositionality**.

In the answer for **break in** ('get somebody accustomed to something new'), the participant talks about *taming somebody* and *putting* them “under your influence and control”, and *in* is – “in this new activity or situation, inside a smaller, closed group”. This is **full compositionality**.

And finally, **put out** ('make a figure or a result wrong') is “adding up figures quickly”, while *out* is – “outside of the range of results when it should be in”. So, there’s a juxtaposition of *in* vs. *out*. This is **full compositionality**.

**Here are all 5 of the answers:**

- 11) **break out** ('become covered in something, like in sweat or rash') – **F-CMP** – “‘out’ – something out in the open, it is visible to everybody; ‘break’ – a sudden, unexpected act” → **particle first**
- 12) **shut in** ('trap or injure something by closing something tightly around it') – **F-CMP** – “‘shut’ – close the door; ‘in’ – inside a place, surrounded by walls, entrapped” → **verb first**
- 13) **draw out** ('make something last longer') – **F-CMP** – “‘draw’ – pulling, stretching, making something longer; ‘out’ – the time or space that is added by stretching - the longer time – it sticks out” → **verb first**
- 14) **break in** ('get somebody accustomed to something new') – **F-CMP** – “‘break’ – tame somebody, put him/her under your influence and control, make somebody do what you want, ‘in’ – involved in this new activity or situation, inside a smaller, closed group” → **verb first**
- 15) **put out** ('make a figure or a result wrong') – **F-CMP** – “‘put’ – adding up the figures quickly (that’s why they’re wrong) – put them together; ‘out’ – wrong, outside of the range of results, it should be in” → **verb first; in vs. out juxtaposition**

2.3.2.2.1.2 SET 2

In the second set of answers there are also 7 PVs with light verbs and 8 PVs with heavy verbs. There was no topology. In **10/15** cases of compositionality, the answers included full compositionality, and in **5/15** cases the answers included partial compositionality. Those 5 answers mostly included the particle – *out*, and only in one case the particle – *in*. However, we will see that in all the answers for the PVs with light verbs the participant first explained the particle, unlike in the answers for the PVs with heavy verbs where the participant explained the particle first only in 3 cases.

The first 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

The answer for **go out** ('stop being fashionable') starts with the particle and includes the *in vs. out* juxtaposition – *in* is “fashionable” and “out is the opposite”. *Go* is “the process of becoming unfashionable”. The participant then talks about the particle again as being “something unaccepted, discarded”. This is **partial compositionality**.

The answer for **pull in** ('move to the side of the road to stop') starts with the particle – *in* is “going inside the lane on the highway”. The verb – *pull* is defined as “pull the handbrake

after you stop the car”. The verb and the particle are explained as two separate events. This is **full compositionality**.

In the answer for *call out* (‘ask somebody to come and help you when there is an emergency’), the participant first explains the verb as – “call somebody when there is something important and you want to be heard”, and *out* is – “outside of the places closest to you”. This is **full compositionality**.

In the answer for *take in* (‘deceive, make somebody believe something that is not true’), the participant first explains the particle using the verb – “take somebody into your world of lies”. And then *in* and *take* are explained separately. *In* is “the lie” and *take* is “the process of deceiving”. This is **full compositionality**.

In the answer for *put out* (‘make somebody go to sleep or unconscious’), *out* is – “outside of the world around you”, and *put* is “the process of punching somebody quickly and hard”. This is **full compositionality**.

**Here are all 5 of the answers:**

- 16) *go out* (‘stop being fashionable’) – **P-CMP** – “‘in’ means fashionable, so ‘out’ is the opposite, ‘go’ is the process of becoming unfashionable; ‘out’ – something unaccepted, discarded” → **particle first**
- 17) *pull in* (‘move to the side of the road to stop’) – **F-CMP** – “‘in’ – going inside the side lane on the highway; ‘pull’ – pull the handbrake after you stop the car – you do that when parking car” → **particle first**
- 18) *call out* (‘ask somebody to come and help you when there is an emergency’) – **F-CMP** – “you ‘call’ somebody when there is something important and you want to be heard; ‘out’ - a bigger area, outside of the places closest to you” → **verb first**
- 19) *take in* (‘deceive, make somebody believe something that is not true’) – **F-CMP** – “‘take’ somebody ‘into’ your world of lies and making them believe it is real and true; ‘in’ – the lie, ‘take’ – the process of deceiving” → **particle first**
- 20) *put out* (‘make somebody go to sleep or unconscious’) – **F-CMP** – “‘out’ – sleeping, unconscious, outside of the world around you, not realizing it; ‘put’ the process of punching somebody quickly and hard” → **particle first**

The second 5 PVs include 3 PVs with heavy verbs and 2 PVs with light verbs.

The answer for the first one – *draw in* (‘become dark earlier as winter approaches’) – starts with the particle. *In* is – “something closed, hidden, dark”, and *draw* is “the process of taking light and hiding it”. This is **partial compositionality**.

In the answer for *shut out* ('refuse to allow a person to share your thoughts, feelings etc. '), the first association is some kind of an entrance. The participant explains that first "a person" hides "their feelings" – "putting them in a dark place" and then "shutting the entrance" so that "the person...is left outside of this area". This is **full compositionality**.

The answer for *call in* ('send for somebody professional and official') starts with the particle, *in* is – "in his/her office", *call* is "ask for somebody". This is **full compositionality**.

The answers for the next 2 PVs containing light verbs both start with the particle.

In the answer for *put out* ('broadcast, publish or issue'), *out* is – "public, known, visible", *put* is "the process of making information public". This is **partial compositionality**.

In the answer for *take in* ('understand and absorb something'), *in* is "inside your brain, in your memory", and *take* is "the process of noticing, etc.". This is **full compositionality**.

**Here are all 5 of the answers:**

21) *draw in* ('become dark earlier as winter approaches') – **P-CMP** – "'in' - something closed, hidden, dark; 'draw' the process of 'taking' light and hiding it, making everything dark" → **particle first**

22) *shut out* ('refuse to allow a person to share your thoughts, feelings etc. ') – **F-CMP** – "a person is hiding his/her feelings from others, putting them in a dark place, 'shutting' the entrance towards them, and the person who wants to see what you're feeling is left 'outside' of this area – he/she is unaware, clueless" → **verb first**

23) *call in* ('send for somebody professional and official') – **F-CMP** – "when a person needs to talk serious business with a professional, they talk in his/hers [sic] office – 'in'; 'call' – ask for somebody" → **particle first**

24) *put out* ('broadcast, publish or issue') – **P-CMP** – "'out' – public, known, visible; 'put' – the process of making information public, showing it to other people" → **particle first**

25) *take in* ('understand and absorb something') – **F-CMP** – "'in' - inside your brain, in your memory, 'take' – the process of noticing, understanding and remembering something" → **particle first**

The third part of this set includes 3 PVs with heavy verbs and 2 PVs with light verbs.

In the answer for *cut out* ('stop doing something'), the verb is explained first. *Cut* is "a sudden and fast act", while *out* is described as – "the things you did before you stopped doing them, are now out". This is **full compositionality**.

The answers for PVs containing light verbs both start with the particle.

In the answer for *go in* ('be understood'), *in* is – “inside your brain” while *go* is “the process of information getting into your brain”. This is **full compositionality**.

In the answer for *put out* ('switch something off'), *out* is – “off, gone, done, finished”, and *put* is “the process of turning something off”. This is **partial compositionality**.

The answers for the next 2 PVs containing heavy verbs both start with the verb.

In the answer for *cut in* ('interrupt somebody's conversation'), *cut* is “a quick and sudden process” and *in* is “in-between two people having a conversation”. This is **full compositionality**.

In the answer for *break out* ('begin suddenly'), *break* is “a quick, unexpected act”, and *out* is – “public, visible, accessible to others”. This is **partial compositionality**.

**Here are all 5 of the answers:**

26) *cut out* ('stop doing something') – **F-CMP** – “‘cut’ – a sudden and fast act; when you cut something, it won't be as before; ‘out’ – something ended, it's finished, gone – the things you did before you stopped doing them, are now ‘out’” → **verb first**

27) *go in* ('be understood') – **F-CMP** – “‘in’ – inside your brain, in your mind; ‘go’ – the process of information, getting into your brain, being processed and realized” → **particle first**

28) *put out* ('switch something off') – **P-CMP** – “‘out’ – off, gone, done, finished – the power is gone when you switch something off; ‘put’ – the process of turning something off – it is quick” → **particle first**

29) *cut in* ('interrupt somebody's conversation') – **F-CMP** – “‘cut’ a quick and sudden process of a person coming in-between two people having a conversation” → **verb first**

30) *break out* ('begin suddenly') – **P-CMP** – ‘break’ – a quick, unexpected act; ‘out’ – public, visible, accessible to others – when something begins, it is visible to others → **verb first**

#### 2.3.2.2.1.3 SET 3

In the last set of answers there are 6 PVs containing light verbs and 9 PVs containing heavy verbs. There was topology in **2** answers. As far as compositional answers go, only **1/11** answers started with the particle and it was in the answer for a PV containing a light verb. However, **10/11** compositional answers included full compositionality, while only **1/11** answers included partial compositionality and that PV included the particle – *out*. There were **2** misinterpretations with the PVs containing heavy verbs.

The first 5 PVs of this set include 2 PVs with light verbs and 3 PVs with heavy verbs.

In the answer for *put in* ('spend time or effort doing something'), the participant explains the particle first – “when you work hard at something, you are...in it”. And then a synonym for *put* is used – “you give it a part of yourself, you put in a part of you”. This is **full compositionality**.

In the next two answers for the PVs with heavy verbs, the verb is explained first.

In the answer for *draw out* ('make somebody feel less nervous or shy'), *draw* is “take somebody by the hand and make them get out”. *Out* is “the real world”. This is **full compositionality**.

In the answer for *break out* ('escape'), *break* is “a sudden and violent action” and you have to “break the door of the jail cell so that you can get out”. This is **full compositionality**.

In the answer for *put in* ('elect a political party as the government') the first association is the process of voting – “you put your votes in the ballot box” and “the party with the most votes ‘put in’ is elected”. This is **a topological answer**.

And in the answer for *cut out* ('stop working'), the verb is explained first. The first association for *cut* is its primary meaning and in this case *a telephone scenario* is used – “you cut the cord of a phone” and it is “a sudden, quick act”. The particle *out* is – “out, broken...dead”. This is **partial compositionality**.

**Here are all 5 of the answers:**

- 31) *put in* ('spend time or effort doing something') – **F-CMP** – “when you work hard at something, you are completely involved in it, you give it a part of yourself, you ‘put in’ a part of you” → **particle first**
- 32) *draw out* ('make somebody feel less nervous or shy') – **F-CMP** – “‘draw’ – take somebody by the hand and make them get ‘out’; ‘out’ – being the public – the person is visible and can see others; ‘out’ – the real world (which is not so scary)” → **verb first**
- 33) *break out* ('escape') – **F-CMP** – “‘break’ – a sudden and violent action; to ‘break’ the door of the jail cell so that you get ‘out’” → **verb first**
- 34) *put in* ('elect a political party as the government') – **TOP** – “when you want to elect a party, you have to vote – you ‘put’ your votes ‘in’ the ballot box; the party with the most votes ‘put in’ is elected”
- 35) *cut out* ('stop working') – **P-CMP** – “‘cut’ – a sudden, quick act, e.g. if you cut the cord of a phone, it stops working – it is ‘out’; broken, it cannot be used, it’s ‘dead’” → **verb first**

The next 5 PVs include 1 PV with a light verb and 4 PVs with heavy verbs.

The answer for **take in** ('make a piece of clothing narrower or tighter') starts with the verb – “you have to take the material at the sides” and then another verb is used to explain the particle – “pull it in – towards the inside of the shirt”. This is **full compositionality**.

In the answer for **pull out** ('stop being involved in something'), we have **topology** and *in* vs. *out* juxtaposition. First, *you are in a group* and then *somebody pulls you outside*, you are *out of the group*.

The next two answers for the heavy PVs both start with the verb.

In the answer for **break in** ('interrupt a conversation'), “your speech ‘breaks’ the conversation” and “it comes between two people (it is ‘in’)”. This is **full compositionality**.

In the answer for **write out** ('write something and include all the necessary information'), first you “write information on a piece of paper and then this information is out”. *Out* is also described as – “public, visible, understandable”. However, the explanation is not clear enough. There is no *include all the necessary information*. Thus, this is a **misinterpretation**.

And the answer for **call in** ('make a public request for a product to be returned') is a **misinterpretation** because it says – “when you want to return the product...you make a call to the company” when it should really be that the company calls the product *in*.

**Here are all 5 of the answers:**

- 36) **take in** ('make a piece of clothing narrower or tighter') – **F-CMP** – “when you want to narrow a T-shirt, you have to ‘take’ the material at the sides and pull it ‘in’ – towards the inside of the shirt” → **verb first**
- 37) **pull out** ('stop being involved in something') – **TOP** – “when you are in a group, you’re involved with them; somebody ‘pulls’ you outside; you find yourself ‘out’ of the group, you are not involved”
- 38) **break in** ('interrupt a conversation') – **F-CMP** – “when you want to speak to somebody who is already involved in a conversation, your speech ‘breaks’ the conversation – it comes between two people (it is ‘in’)” → **verb first**
- 39) **write out** ('write something and include all the necessary information') – **MIS** – “when you ‘write out’ something, you ‘write’ information on a piece of paper and then this information is ‘out’ – public, visible, understandable”
- 40) **call in** ('make a public request for a product to be returned') – **MIS** – “when you want to return a product, you ‘call’ the company in which you bought it; you make a call to the company; ‘in’ the company is where the request is received”



In the third part of this set, and in the last 5 answers of the questionnaire, there are 3 PVs containing light verbs and 2 PVs containing heavy verbs and they switch back and forth. In all 5 of the answers, the participant starts with the verb and then goes on to explain the particle. They all include full compositionality.

In the answer for *put in* ('interrupt') there is no context given but the participant uses the *conversation analogy* similar to the *cut in(to a conversation)* and *break in(to a conversation)* so – “you ‘put’ your words and speech between the two people” and then “the speech is in-between”. This is **full compositionality**.

In the answer for *shut out* ('stop something from entering'), the first association is *the door* – “close the door from the inside” so “the person...stays out”. This is **full compositionality**.

In the answer for *put out* ('make trouble, problems, extra work'), *put* is “a quick movement” and then the verb is used to explain the particle – “‘put’ somebody outside the house”. *Out* is also – “unsafe, exposed to harms, in trouble”. This is **full compositionality**.

In the answer for *write in* ('write to ask or complain'), first you have to “write a letter to an institution” and then “the letter goes in”. This is **full compositionality**.

In the last answer of the set – *take out* ('kill somebody') – you first “take somebody’s life” and to do that you have to “pull somebody’s heart out” (*reverse viewing* of the primary meaning). But then the participant goes on to explain that *out* means “dead” but also – “outside of the world of the living” – which is *normal viewing*. This is **full compositionality**.

**Here are all 5 of the answers:**

- 41) *put in* ('interrupt') – **F-CMP** – “when you interrupt, for example, a conversation, you ‘put’ your words and speech between the two people you are interrupting; the speech is in-between” → **verb first**
- 42) *shut out* ('stop something from entering') – **F-CMP** – “‘shut’ – close the door from the inside so the person who wants to get in, stays ‘out’” → **verb first**
- 43) *put out* ('make trouble, problems, extra work') – **F-CMP** – “‘put’ – a quick movement to inconvenience somebody; ‘put’ somebody outside the house; ‘out’ – unsafe, exposed to harms, in trouble” → **verb first**
- 44) *write in* ('write to ask or complain') – **F-CMP** – “when you ‘write in’, you usually ‘write’ a letter to an institution; the letter goes ‘in’ there and then somebody in charge reads it and responds” → **verb first**

45) *take out* ('kill somebody') – **F-CMP** – “‘take’ somebody’s life – to kill somebody (e.g. you pull somebody’s heart out, you ‘take’ it); ‘out’ – dead; outside the world of the living” → **verb first**

#### 2.3.2.2.1.4 Discussion and Conclusions: Questionnaire 2 – verbal answers

Topology (3/45) was present in the first and the third part of this questionnaire and it occurred more with the PVs with light verbs (L 2 vs. H 1). Most of the answers were compositional (40/45). There were no lexical answers (0/45) or paraphrases (0/45). Misinterpretations (2/45) occurred in the third part of the questionnaire and only with the PVs containing heavy verbs (H 2/25).

There were 18 compositional answers among the PVs containing light verbs and 22 compositional answers among the PVs containing heavy verbs (L 18/20 vs. H 22/25). Most compositional answers of all 3 sets included *full compositionality* (31/45: 11/14, 10/15, 10/11). Full compositionality was more common for the PVs containing heavy verbs (L 13/18 vs. H 18/22). *Partial compositionality* was more typical for the PVs containing light verbs (L 5/18 vs. H 4/22). However, we can conclude that in those cases, the participant assigned different meanings primarily to the particle *out* and only in two cases to the particle *in*.

When it comes to putting the emphasis on the particle and explaining it first, this was most visible in the second set (13/45: 2/15, 10/15, 1/15). In all the answers for the PVs containing light verbs, the participant first explained the particle, whereas this was true only in 3/8 cases for the PVs containing heavy verbs. In the first set the ratio between the PVs containing light verbs and heavy verbs was 1:1, while in the third set, only 1 answer started with the particle and that PV contained a light verb.

When it comes to the description of verbs, light verbs were usually described as some kind of a process based on the given meaning of the PV. Also, *go* is movement, *take* is sometimes *pulling* and *put* is *to put* something somewhere.

The description of heavy verbs depended on the verb itself. *Call* is – to call somebody and to ask for somebody. *Cut* is – a sudden, harsh movement/act/process and cutting something. *Break* is – to break something; a sudden/quick unexpected/violent act and to tame. *Draw* is – pulling, stretching, making something longer, taking. *Pull* is – pulling a rope/something, to attract. *Shut* is – close the door or shut the entrance. And *write* is – write on a piece of paper and write a letter.

### 2.3.2.2.2 Pictorial representations: Questionnaire 2

In the pictorial representations, there were **0** topological drawings, **42** compositional drawings and **3** misinterpretations.

To be more precise, there were 19 compositional drawings among the PVs with light verbs and 23 compositional drawings among the PVs with heavy verbs. Misinterpretations were slightly more common for the PVs containing heavy verbs (L 1 vs. H 2).

For the analysis to be clearer, the questionnaire was divided into **3 sets of drawings** – each containing **15 drawings**. Each set was then separated into **groups of 5**.

Just like in the verbal answers, we do not dwell into all the possible intermediate cases of compositionality. Compositional drawings were categorized into 2 main groups seen in this questionnaire. The first group includes drawings in which the participant drew the particle with clear topology; and we call this – *full compositionality* (F-CMP). The second group includes drawings in which the particle was assigned different meanings; and we call this – *partial compositionality* (P-CMP).

The participant tried to show us both the particle and the verb in all the drawings by writing them down next to the action or next to the arrow (direction) of the action. Most drawings also included textual explanations of other parts of the drawing to make sure we understood what was meant to be shown.

#### 2.3.2.2.2.1 SET 1

In the first set of drawings there are 7 PVs with light verbs, and 8 PVs with heavy verbs. There were **14** compositional drawings (L 6/7 vs. H 8/8) and **1** misinterpretation (L 1/7 vs. H 0/8). Compositional drawings included 11 cases of full compositionality and 3 cases of partial compositionality. Partial compositionality always occurred with the particle – *out*.

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the drawing of ***go out*** ('stop burning'), the participant is showing us the three stages of 'stop burning'. In the first one the fire is burning, in the second one it is burning less and in the third one it is no longer burning. There is an arrow above all three stages and it is denoted as – *go*. The last stage is denoted as – *out*. The particle is equated with 'stop burning'. Thus, this is **partial compositionality**.

In the drawing of ***break in*** ('wear something until it is comfortable'), there are 2 images. In one there is a foot in a shoe and an arrow towards *in* and 4 arrows towards *out* – they represent the process of breaking. Both the particle and the verb are written in the image. In the second image, the shoe fits the foot perfectly. This is **full compositionality**.

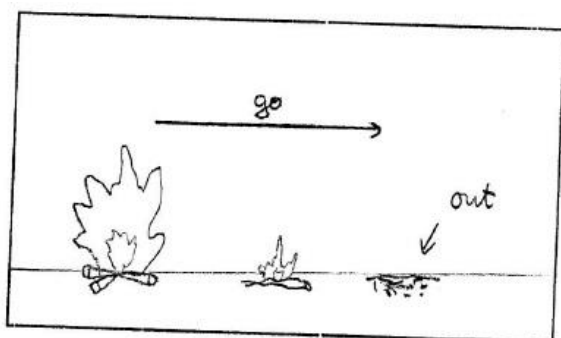
In the drawing of **take out** ('obtain an official document or a service'), a person is taking the document out of the institution. There is a person holding a document in their hand (take) and two arrows are pointing towards out, out of the building with institution of some sorts written on it. Both the verb and the particle are written in the drawing. This is **full compositionality**.

In the drawing of **call in** ('make a short visit, usually on the way to another place'), there is a door and two people are having a conversation (speech bubbles) with call written below the person closes to the door. There is an arrow going from the door towards the inside denoted as – in. This is **full compositionality**.

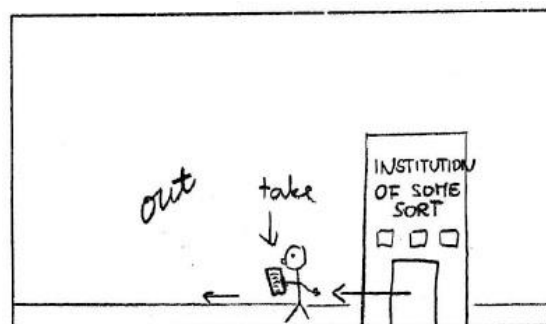
And in the drawing of **put out** ('injure your back, shoulder, hip etc. '), the before and after images are pictured – two people are playing football and what is visible in the next image is the injury. The first drawing is denoted as – put. And the injury in the next drawing is denoted as out. This is **full compositionality**.

Here are all 5 of the drawings:

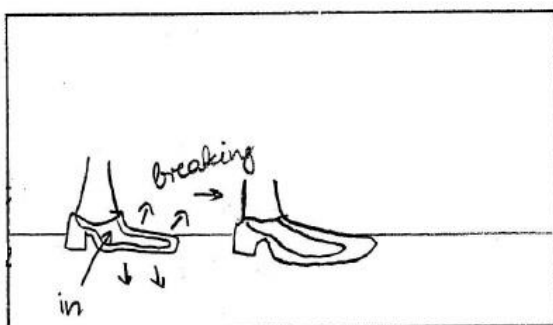
1) **go out** ('stop burning') – **P-CMP**



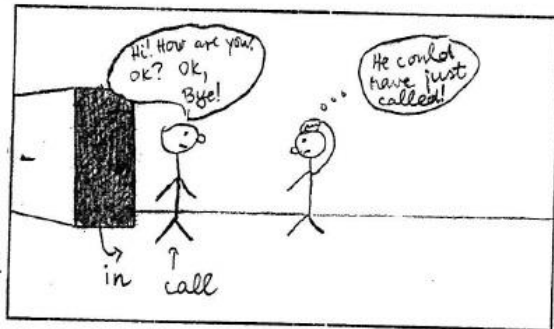
3) **take out** ('obtain an official document or a service') – **F-CMP**



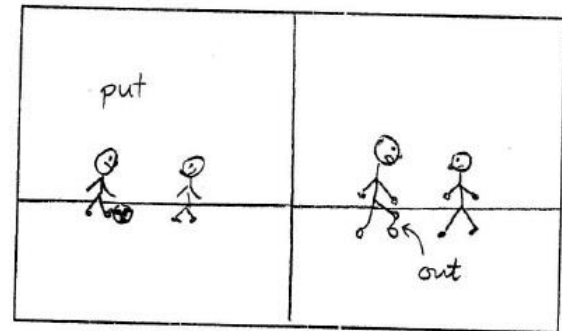
2) **break in** ('wear something until it is comfortable') – **F-CMP**



- 4) **call in** ('make a short visit, usually on the way to another place') – **F-CMP**



- 5) **put out** ('injure your back, shoulder, hip etc.') – **F-CMP**



The next 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

The drawing of **go in** ('become hidden') includes *a person going towards (arrow) a door* – which represents *in*. *Go* is written above the arrow. This is **full compositionality**.

In the drawing of **put out** ('extinguish, stop from burning'), the *before* and *after* images are pictured. In the first one, a person is *putting* his/her foot on the fire – this is *put*. In the next one, the fire has stopped burning and this is denoted as *out*. Both the verb and the particle are visible in the drawing, but the particle is not spatial. This is **partial compositionality**.

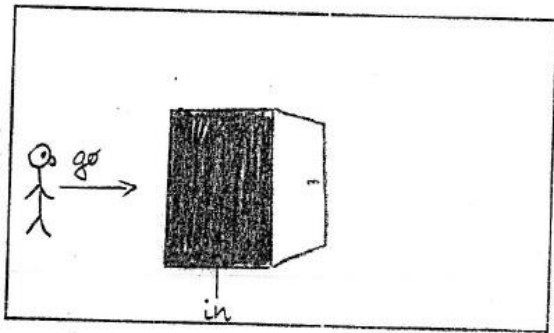
For **pull in** ('attract people in large numbers') the first association is – *pulling a rope*. There is *a person pulling people using a rope towards himself/herself*; one arrow on each side points towards the person – *in*. The particle is written above the person's head and *pull* above the arrows towards *in*. This is **full compositionality**.

For **cut out** ('prevent something from reaching somewhere') the first association are *the scissors* – *the path leading to the goal is cut* and *the person cannot get to the goal*. The goal is denoted as - *out*. This is **full compositionality**.

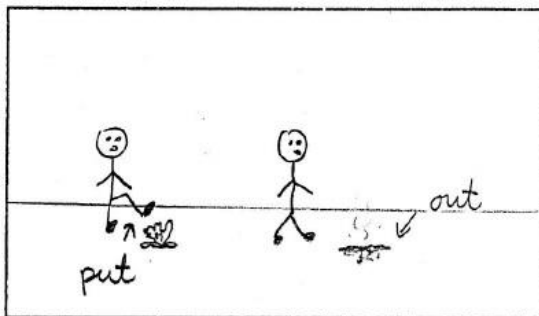
In the drawing of **put in** ('officially make a claim for something'), we can see *a person taking a claim into the institution*. There are 2 images. In the first one there is an arrow pointing towards the door of "the institution" – *in*. In the next image *that person is putting the claim on the table*. This is **full compositionality**.

**Here are all 5 of the drawings:**

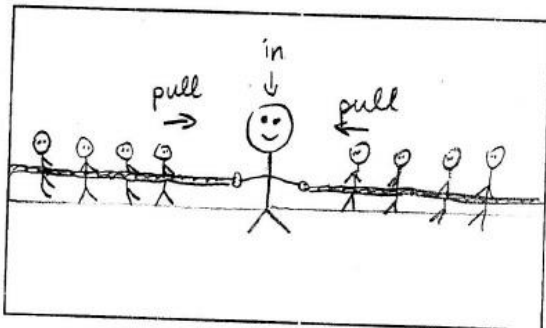
6) *go in* ('become hidden') – **F-CMP**



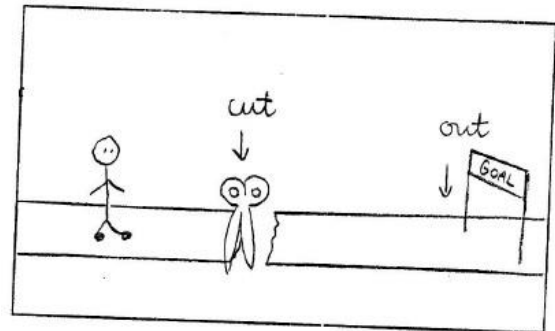
7) *put out* ('extinguish, stop from burning') – **P-CMP**



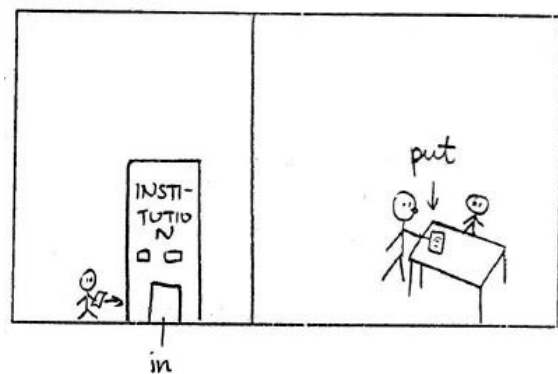
8) *pull in* ('attract people in large numbers') – **F-CMP**



9) *cut out* ('prevent something from reaching somewhere') – **F-CMP**



10) *put in* ('officially make a claim for something') – **F-CMP**



The third part of this set includes 4 PVs with heavy and 1 PV with a light verb. In the drawing of *break out* ('become covered in something, like in sweat or rash'), the *before* and *after* images are pictured and what is visible is – a person with and without a rash. There is an arrow going from the first stage to the second one and it is denoted as – *break*. The rash on the person's face visible in the second stage is denoted as – *out*. We could argue that this *out* is spatial (on the skin) but it could also be synonymous with *visible* ('become covered...'). Thus, we will categorize this as **partial compositionality**.

For *shut in* ('trap or injure something by closing something tightly around it') the first association is drawing a door. In this case, there are two images – in one a person is shutting the door of a cage with a cat inside. In the next one, there is an arrow towards the closed cage

denoted as – *in*. Both the verb and the particle are written in the drawing. This is **full compositionality**.

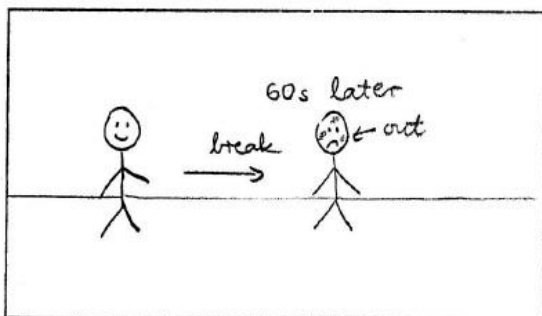
In the drawing of *draw out* ('make something last longer'), there are again two images. In one *a person is pulling something with both hands* and there are arrows on both the left and the right side; *draw* is written under the image. In the second image, the thing is *longer*, and the participant shows us that the parts that were drawn out are – *out*. This is **full compositionality**.

The drawing of *break in* ('get somebody accustomed to something new') includes a *people scenario* – *a person is taking/pushing someone into a crowd (circle) of people*. There is an arrow towards *in* (the crowd of people) and *break* is written above it, and there is another arrow inside the crowd with *in* written above it. This is **full compositionality**.

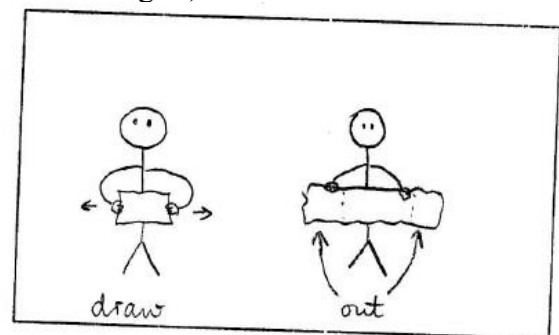
And finally, in the drawing of *put out* ('make a figure or a result wrong') there is a math exercise – *adding up numbers and getting the wrong result*. The participant drew *a person* above the exercise *rearranging (putting) the numbers* – *doing the action*. And the wrong result at the end is denoted as *out*. However, this is not what this PV means so this is a **misinterpretation**.

**Here are all 5 of the drawings:**

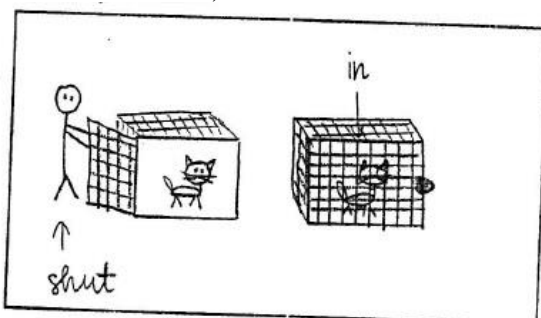
11) *break out* ('become covered in something, like in sweat or rash') – **P-CMP**



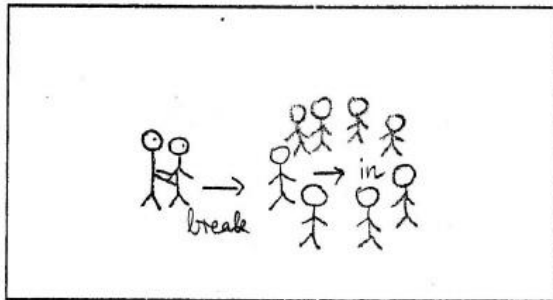
13) *draw out* ('make something last longer') - **F-CMP**



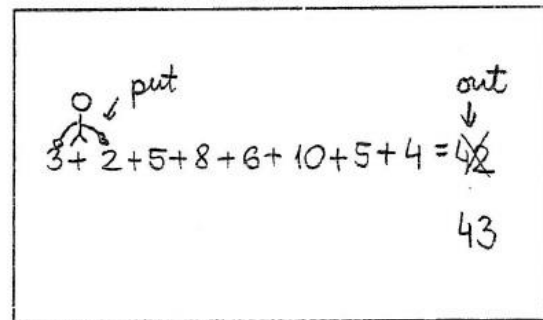
12) *shut in* ('trap or injure something by closing something tightly around it') – **F-CMP**



14) **break in** ('get somebody accustomed to something new') –  
**F-CMP**



15) **put out** ('make a figure or a result wrong') - **MIS**



#### 2.3.2.2.2 SET 2

In the second set of drawings there are also 7 PVs containing light verbs and 8 PVs containing heavy verbs. There were **15** compositional drawings (L 7/7 vs. H 8/8) and they included **13** cases of full compositionality and **2** cases of partial compositionality. Partial compositionality always occurred with *put out*.

The first 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs

In the drawing of **go out** ('stop being fashionable'), there is a *T-shirt going out of the door*. Again, there are two arrows pointing towards – *out*. One is *go* and the other one inside the door is *out*. This is **full compositionality**.

The drawing of **pull in** ('move to the side of the road to stop') includes two images. The first one shows a *car going inside the side of the road* – there is an arrow towards *in*. The other one includes *pulling the parking brake*. The verb was not shown as *pulling the car* but we cannot ignore it is there. Thus, this **full compositionality**.

In the drawing of **call out** ('ask somebody to come and help you when there is an emergency') there are 3 arrows coming *out of the person's mouth* and they represent *call*. *Call* is written above the arrows. In the distance, we can see *two people* that represent where *out* is – it is also written in the drawing. This is **full compositionality**.

In the drawing of **take in** ('deceive, make somebody believe something that is not true'), there is a *person taking another person by the hand into a world of lies*. *Take* is written below the two persons to make sure we understood it and an arrow points towards *the world of lies* – *in*. This world of lies has *money on trees* and a *unicorn* in it. This is **full compositionality**.

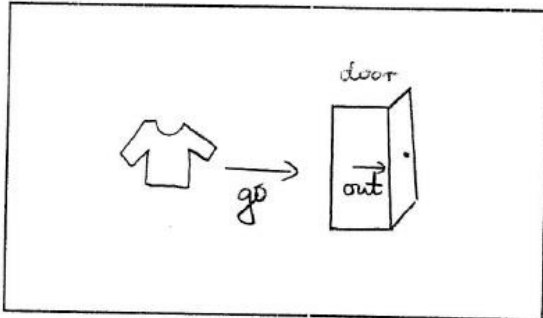
And the drawing of **put out** ('make somebody go to sleep or unconscious') includes the *before* and *after* images. In the first one there is a *person punching another person* and



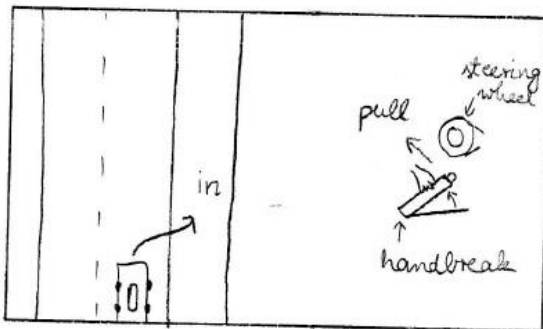
*punch* equals *put* is written next to the image. In the next image, the person is *unconscious* and *out* is written above him/her. The particle is equated with *unconscious* and thus this is **partial compositionality**.

Here are all 5 of the drawings:

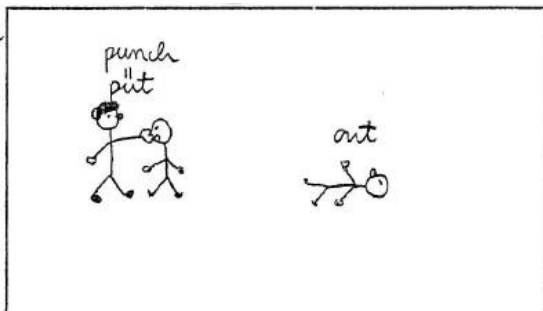
16) **go out** ('stop being fashionable') – **F-CMP**



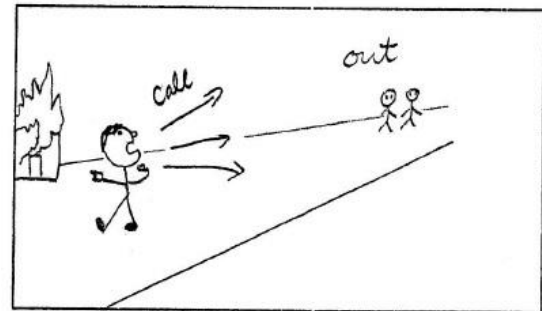
17) **pull in** ('move to the side of the road to stop') – **F-CMP**



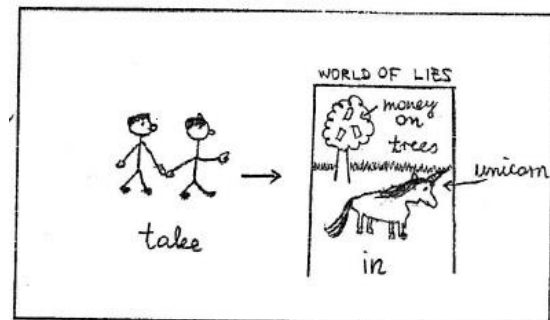
20) **put out** ('make somebody go to sleep or unconscious') – **P-CMP**



18) **call out** ('ask somebody to come and help you when there is an emergency') – **F-CMP**



19) **take in** ('deceive, make somebody believe something that is not true') – **F-CMP**



The second 5 PVs include 3 PVs with heavy verbs and then 2 PVs with light verbs.

The drawing of **draw in** ('become dark earlier as winter approaches') includes *a person drawing the sun and putting it in the bag*. There are 3 stages – drawing the sun, putting it in the bag, and the sun is in the bag. In the second image, there is an arrow pointing towards the bag – *in* but also an additional text to clarify the drawing. This is a very specific image of what happens when it becomes dark earlier and both the verb and the particle are included so this is **full compositionality**.

In the drawing of **shut out** ('refuse to allow a person to share your thoughts, feelings etc. '), the first association is to draw *shut*. There is *a person shutting their heart into a container*. The text next to it clarifies that *the heart* is a symbol for *the person's feelings*. And right next to the person doing the action, there is another person with – *out* written above their head. Thus, this is **full compositionality**.

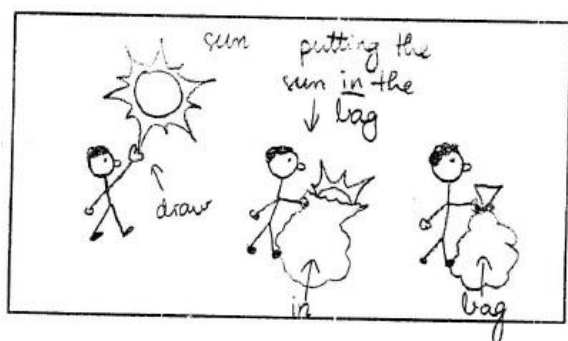
The drawing of **call in** ('send for somebody professional and official') includes *a door* and *two persons* going *into an office*. We know that the door leads to an office because it is written above the door. The direction is shown with the arrow towards – *in*. The first person is *calling* the other one *in*. *Call* is written above his/her head. The second person is carrying a *bag* which tells us this person is a professional. This is **full compositionality**.

The drawing of **put out** ('broadcast, publish or issue') again includes *a door* with *a sign* above that says *Večernji list*, so we know this is a building – the newspaper headquarters. There is *a person* going *out of the door*; an arrow points towards – *out*. The person is holding a newspaper in his/her hand and *put* is written above the hand. A group of people is waiting outside – *out* is written above them. They have their hands outstretched because they are waiting for the newspaper. There is another arrow from the person carrying the newspaper to this group of people. This is **full compositionality**.

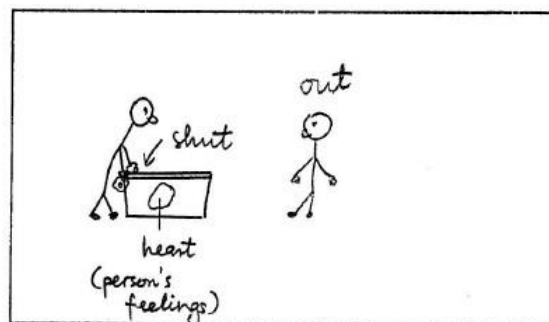
And in the drawing of **take in** ('understand and absorb something'), there are two images. In the first one, there is *a person's head* and *the brain* is denoted as *in*. On the outside, there is an *E=mc<sup>2</sup> equation*, *a musical note* and *idioms* each in their own bubble with arrows towards the brain – *in*. However, there is also a hand *taking the equation inside the brain*. *Take* is written next to the hand to clarify this is the verb. In the image next to it, all these things are now in the brain and the text "it's in" is written above it. This is **full compositionality**.

**Here are all 5 of the drawings:**

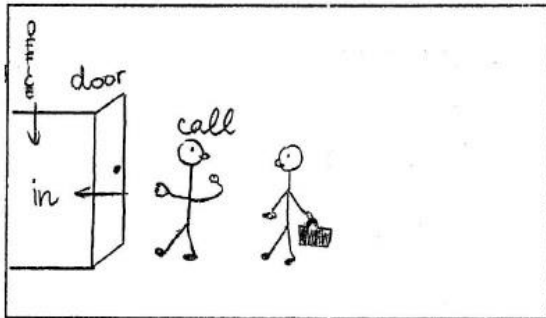
21) **draw in** ('become dark earlier as winter approaches') – **F-CMP**



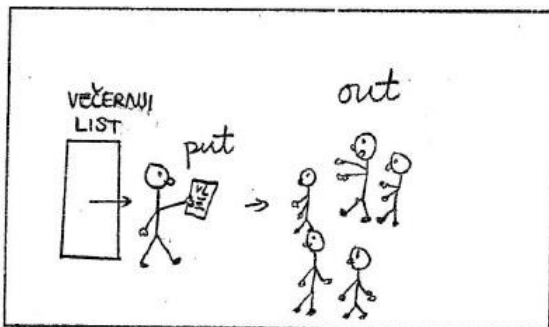
22) **shut out** ('refuse to allow a person to share your thoughts, feelings etc. ') – **F-CMP**



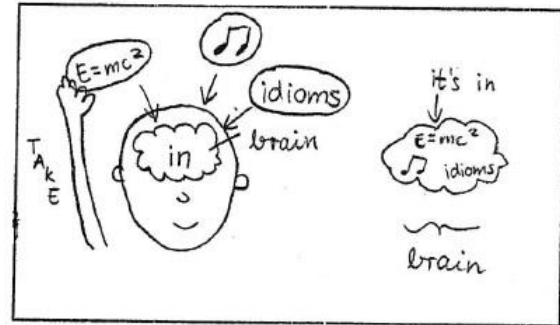
23) **call in** ('send for somebody professional and official') – **F-CMP**



24) **put out** ('broadcast, publish or issue') – **F-CMP**



25) **take in** ('understand and absorb something') – **F-CMP**



The next 5 PVs include 3 PVs with heavy verbs and 2 PVs with light verbs.

In the drawing of **cut out** ('stop doing something'), the first association are *the scissors*. "The thing that you were doing" is cut with scissors and "the same thing you were supposed to do" is *out* – leaving. There is an arrow towards *out*. This is **full compositionality**.

In the drawing of **go in** ('be understood'), there *the equation* "E=mc<sup>2</sup>" is going *into* "the brain" – *in*. The verb is written next to the arrow. Unlike in the ex. 25 for *take in* where the drawing is similar, here there is no subject doing the action. This is **full compositionality**.

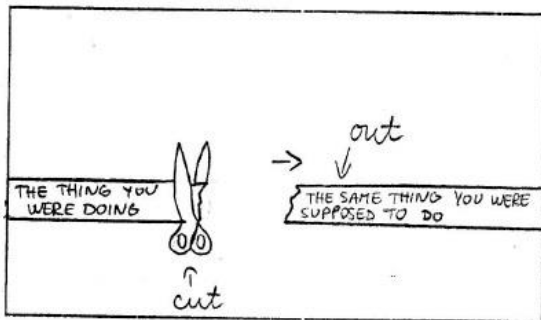
In the drawing of **put out** ('switch something off'), there are the *before* and *after* images. In the first one there is a person turning off the light. The action of pressing the switch is denoted as *put*. In the next image, the light is off and the whole room is dark. The only things visible is the bulb that is off and a pair of eyes from the person who switched it off. *Off* is written next to the bulb, but unlike in the other drawings, there is no *out* in the drawing. However, we cannot consider this to be lexical determination or a visual paraphrase because in the verbal explanation the participant equates *out* with *off* which is why we can assume the participant did try to show us both the verb and the particle. This is **partial compositionality**.

In the drawing of *cut in* ('interrupt somebody's conversation'), there are two people presumably having a conversation. The space between them is denoted as – *in*. The third person is outside of that space and going *in*. There is a straight arrow pointing towards – *in* and *cut* is written next to it. In the next image, the third person is now in-between the two people. This is **full compositionality**.

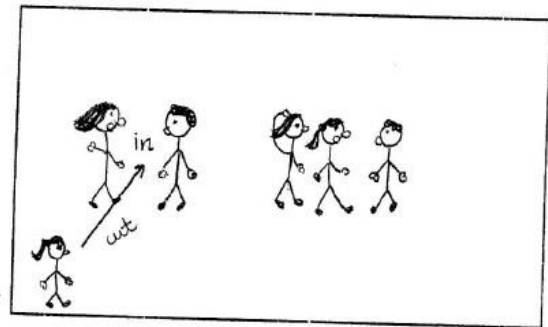
In the drawing of *break out* ('begin suddenly'), there are two images. In one there is a closed box. In the other one a toy broke out of a box. The open lid is denoted as – *break* and there are 2 arrows going *out of the box* on each side of the toy with *out* written above the toy. The toy is denoted as – *jack-in-the-box*. This is **full compositionality**.

Here are all 5 of the drawing:

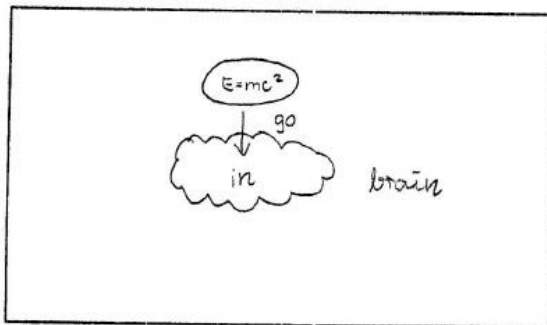
26) *cut out* ('stop doing something') – F-CMP



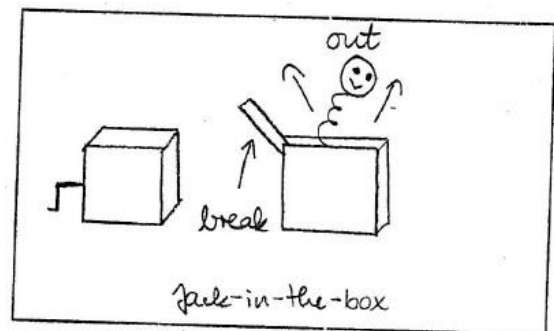
29) *cut in* ('interrupt somebody's conversation') – F-CMP



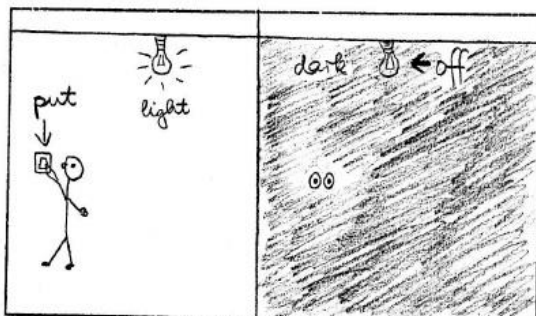
27) *go in* ('be understood') – F-CMP



30) *break out* ('begin suddenly') – F-CMP



28) *put out* ('switch something off') – P-CMP



### 2.3.2.2.2.3 SET 3

In the third set of drawings there are 6 PVs containing light verbs and 9 PVs containing heavy verbs. There were **13** compositional drawings (L 6/6 vs. H 7/9) and **2** misinterpretations (L 0/6 vs. H 2/9). Compositional drawings included 11 cases of full compositionality, 1 case of partial compositionality and 1 case of both. Partial compositionality always occurred with the particle – *out*.

The first 5 PVs of this set, include 2 PVs with light verbs and 3 PVs with heavy verbs.

In the drawing of ***put in*** ('spend time or effort doing something') there is *a person putting a part of himself/herself into the work s/he has to do*. There is an arrow pointing from "a part of you" towards *in* (a box-like container with *the work you have to do* written next to it) and *put* is written next to it. This is **full compositionality**.

In the drawing of ***draw out*** ('make somebody feel less nervous or shy'), there is *a person drawing/pulling the other person out into the crowd of people*. *Draw* is *taking the other person by the hand* and there is an arrow pointing towards *out* – where other people are. This is **full compositionality**.

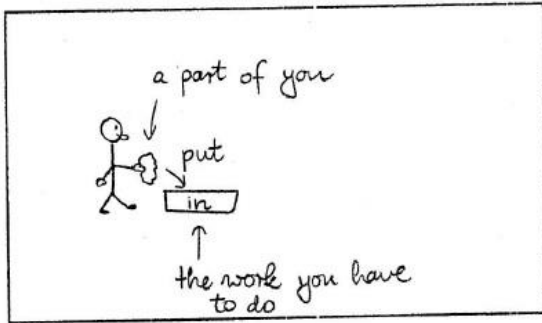
In the drawing of ***break out*** ('escape'), there is *a person breaking out of a jail*. *Jail* is written above *the prison bars* which are *broken*. *Break* is also shown by *a zig zag line* attached to the arrow pointing towards *out* and it is also written next to the zig zag line. The person is first seen with *a frowny face inside the jail* and *stepping out of it* through the broken bars and then *s/he is out – wearing a smile*. This is **full compositionality**.

In the drawing of ***put in*** ('elect a political party as the government') the first association is *putting your vote into the ballot box*. There is *a person holding their vote* and an arrow pointing towards *the ballot box – in*. This drawing is similar to PV no. 31 (*put in*). This is **full compositionality**.

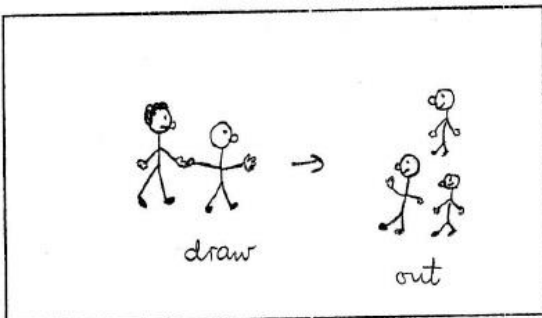
In the drawing of ***cut out*** ('stop working') the first association is to draw *cutting*. In this case, there is a telephone and its cord has been *cut with a knife*. *Out* is written above the phone to denote *out* but *out* here equals 'stop working', it is not spatial. This is **partial compositionality**.

**Here are all 5 of the drawings:**

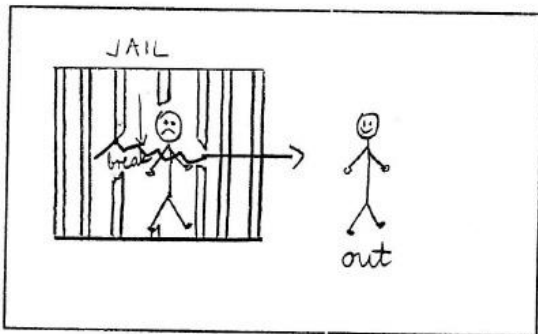
31) **put in** ('spend time or effort doing something') – **F-CMP**



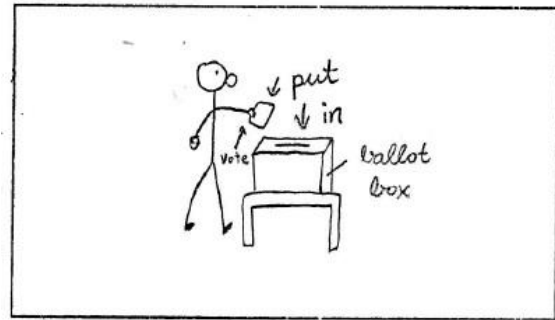
32) **draw out** ('make somebody feel less nervous or shy') – **F-CMP**



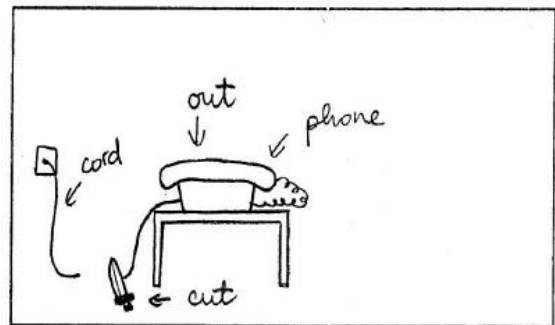
33) **break out** ('escape') – **F-CMP**



34) **put in** ('elect a political party as the government') – **F-CMP**



35) **cut out** ('stop working') – **P-CMP**



The second part of the set includes 1 PV with a light verb and 4 PVs with heavy verbs.

In the drawing of **take in** ('make a piece of clothing narrower or tighter'), there are the *before* and *after* images of a T-Shirt. First, the T-shirt is normal-sized and *in* is written in the middle of it. On each side, there is an arrow towards *the inside of the T-shirt*. Both arrows are denoted as – *take*. In the second image, the T-shirt is narrower and again there are two arrows on each side of the T-shirt, outside of it this time, and pointing towards *the inside of the T-shirt*. The T-shirt is now *narrower/tighter*. This is **full compositionality**.

In the drawing of **pull out** ('stop being involved in something'), there is a *people scenario* and the *before* and *after* images. In the first one, a *person is pulling somebody outside of the crowd*. The crowd is denoted as – *in* and there is an arrow towards – *outside*,

next to the person doing the action (*pulling*). *Pull* is written below. In the second image, the two people are *out*, while the crowd is still *in*. This is **full compositionality**.

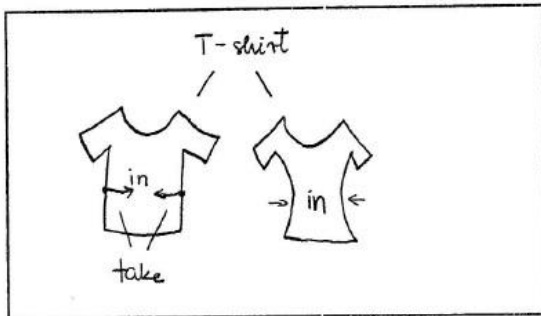
In the drawing of ***break in*** ('interrupt a conversation'), 2 people are having a conversation and the space between them is denoted as – *in*. There are 2 arrows pointing from one person to the other, each denoting the direction of their speech. There is also a person on the outside and a slightly curved arrow (not a straight one like in the drawing no. 29 with *cut in*) from his/her mouth towards the inside of the lines of the conversation between the two people. The drawing is similar to PV no. 29 (*cut in*). This is **full compositionality**

In the drawing of ***write out*** ('write something and include all the necessary information'), there are the *before* and *after* images. In the first image, there is a person doing the action – *sitting at the table and writing*. In the second image, *the paper* (what was written down) is put somewhere so that people can see it. This is denoted as *out*. However, despite the arrow showing the connection between the two drawings, the meaning – *include all the necessary information* – is not visible. Thus, this is a **misinterpretation**.

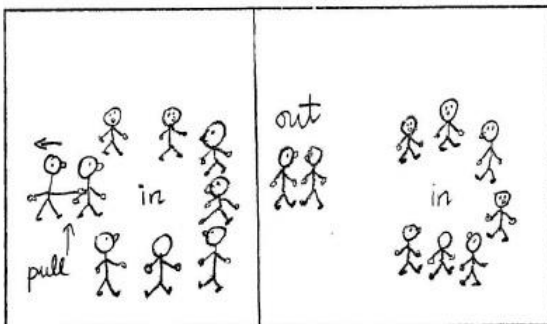
In the drawing of ***call in*** ('make a public request for a product to be returned'), a person is making a call into the company. However, the meaning of this PV is not – *you + call + the company*. *The company should call the product in*. This is a **misinterpretation**.

**Here are all 5 of the drawings:**

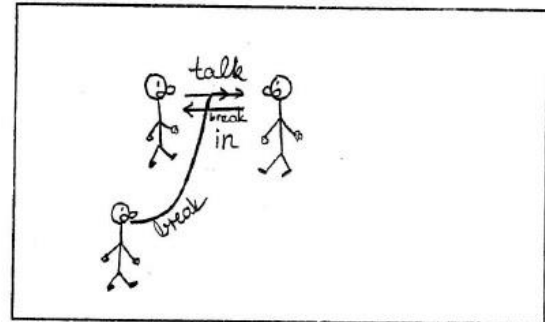
36) ***take in*** ('make a piece of clothing narrower or tighter') – **F-CMP**



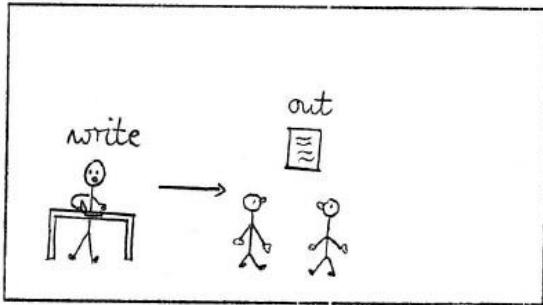
37) ***pull out*** ('stop being involved in something') – **F-CMP**



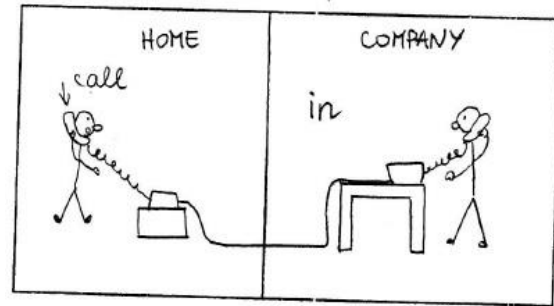
38) ***break in*** ('interrupt a conversation') – **F-CMP**



39) **write out** ('write something and include all the necessary information') - MIS



40) **call in** ('make a public request for a product to be returned') – MIS



In the third part of this set, and in the last 5 drawings of the questionnaire, there are 3 PVs with light verbs and 2 PVs with heavy verbs and they switch back and forth.

The drawing of **put in** ('interrupt') is similar to the drawings no. 29 (*cut in*) and no. 38 (*break in*) and even though there is no context given for this PV, the participant uses *the conversation analogy*. There are 2 people presumably *having a conversation* and the space between them is denoted as *in*. *The third person* is holding words *in the palm of his/her hand* – this is *put*. There is a slightly curvy arrow going from the words towards *in*. The conversation is interrupted. This is **full compositionality**.

In the drawing of **shut out** ('stop something from entering'), there are *the before* and *after* images. In the first one, *a person* is *inside a container* with a *garage-like door* and *the door is closing*. There is an arrow towards down to show us the process of *shutting* and *shut* is written next to it. There is also *a person on the outside*. In the next image, the door is *shut* and the other person is still *outside* – *out* is written above his/her head. There is the *in* vs. *out* juxtaposition here. This is **full compositionality**.

In the drawing of **put out** ('make trouble, problems, extra work'), there is *a person* going *out of the house* and *an arrow* from *inside the house* towards *the outside*. A think bubble saying – "Oh dear!" is above the person's head. S/he is obviously calling the person hidden behind the tree and in the bushes – only the eyes are visible and the sound above saying – "Grrr". Some kind of trouble is at play here. This is **full compositionality**.

In the drawing of **write in** ('write to ask or complain'), a person is sitting at the table and writing *a letter* and there is an arrow pointing towards *the institution* – *the person* is now walking towards *in*, taking the letter into the institution. This is **full compositionality**.

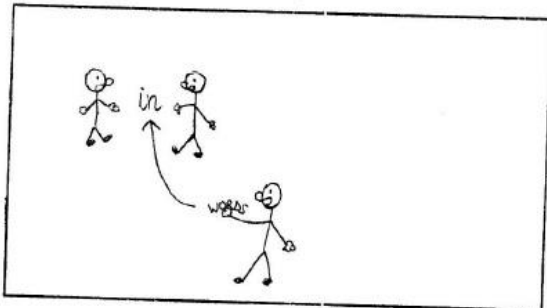
And in the last drawing of the questionnaire – **take out** ('kill somebody') – there are 2 images. First, *a person* is *taking the other person's heart out of his/her chest*. An arrow is pointing towards *outside of the body* and *take* is written above *the hand* of the person doing



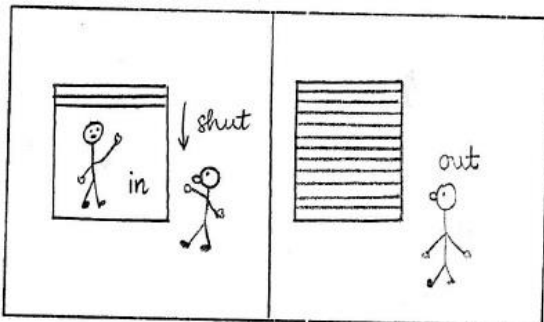
the action. This is spatial and *reverse viewing*. In the next image, *the heart* is in that person's hand and the other person is *dead (out)*. This is both **full** and **partial compositionality**.

**Here are all 5 of the drawings:**

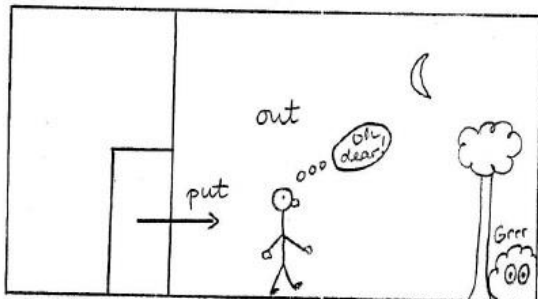
41) **put in** ('interrupt') – **F-CMP**



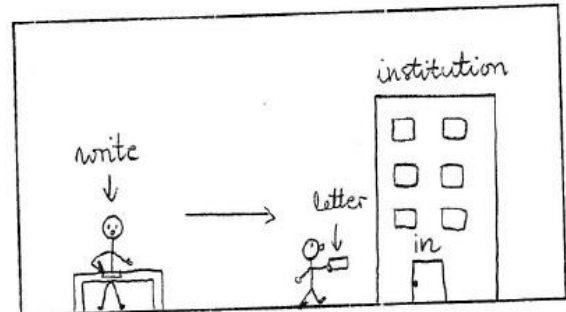
42) **shut out** ('stop something from entering') – **F-CMP**



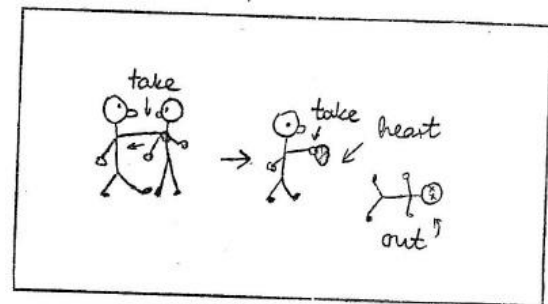
43) **put out** ('make trouble, problems, extra work') – **F-CMP**



44) **write in** ('write to ask or complain') – **F-CMP**



45) **take out** ('kill somebody') – **F-CMP – R and P-CMP**



#### 2.3.2.2.2.4 Discussion and Conclusions: Questionnaire 2 – pictorial representations

There was no topology in the pictorial representations of this questionnaire (0/45). Compositionality was present equally in all three parts of the questionnaire (14/15, 15/15, 13/15). There were no lexical drawings (0/45) or visual paraphrases (0/45). Misinterpretations occurred in the first and third part of the questionnaire (1/15, 0/15, 2/15).

There were **42** compositional drawings – 19 compositional drawings with the PVs containing light verbs and 23 compositional drawings with the PVs containing heavy verbs (L 19/20 vs. H 23/25). Most compositional answers of all 3 sets included *full compositionality* (35/45: 11/14, 13/15, 11/13). Full compositionality was more common for the PVs containing heavy verbs (L 14/19 vs. H 21/23). *Partial compositionality* was more typical for the PVs containing light verbs (L 4/19 vs. H 2/23). In one case, there was both full and partial compositionality in the drawing (L 1/19). However, we can conclude that when it comes to partial compositionality, the participant assigned different meanings primarily to the particle – *out*. It was also most noticeable with the PV *put out* (3/7).

Misinterpretations occurred slightly more with the PVs with heavy verbs (L 1/20 vs. H 2/25) and, unlike in the verbal answers, with the PVs with the particle *out* (*in* 1 vs. *out* 2).

When it comes to the process of drawing the PVs with light verbs or heavy verbs, the participant always included both the verb and the particle and wrote them in the drawing.

*Go in/out* usually included – something or somebody *going* in/out through the door or into something. *Take in/out* usually included – somebody *taking* somebody somewhere or somebody *taking* something (using their hands) *into/out* of something/somewhere. *Put in/out* usually included – *going* somewhere and *putting* something using their *hand/s* *into/out* of something/somewhere.

*Call in/out* usually included – *speech bubbles*, *arrows coming out of somebody's mouth* or *call* written somewhere, and arrows towards *in/out*. *Cut out* usually included – *scissors*, or a *knife*, and only in *cut in* was there a straight line, denoting *cut + in*. *Break in/out* usually included – *zig zag lines* or it was written next to the action + *into/out* of something. *Draw/pull in/out* usually included – *drawing/pulling* something/somebody *into/out* of something using your *hand/s*. *Shut in/out* usually included – *shutting* a container and you are *out* or *shutting + into* a container. And *write in/out* something usually included – *writing* or *write* something and *go into* a place.

### 2.3.2.3 QUESTIONNAIRE 3

This questionnaire was selected because there was a lot of topology and compositionality in the verbal answers but also many lexical answers as well and we wanted to see if the same could be said about the pictorial representations. The participant was Mexican.

There were **45/45** answers in both verbal and pictorial representations of **Questionnaire 3**.

#### 2.3.2.3.1 Verbal answers: Questionnaire 3

In the verbal answers, there were **13** topological, **15** compositional, **9** lexical, **6** paraphrases, and **2** misinterpretations.

To be more precise, topology was more typical for the PVs with light verbs (L 10/20 vs. H 3/25), while compositionality occurred almost equally among both types of PVs (L 7/20 vs. H 8/25). However, lexical determination occurred only among the PVs with heavy verbs (L 0 vs. H 9). There were 2 misinterpretations among both types of PVs (L 1/20 vs. H 1/25).

For the analysis to be clearer, the questionnaire was divided into **3 sets of answers** – each containing **15 answers**. Each set was then separated into **groups of 5**.

##### 2.3.2.3.1.1 SET 1

In the first set of answers there are 7 PVs containing light verbs, and 8 PVs containing heavy verbs. There were **4** topological answers, **5** compositional answers, **2** lexical answers, **3** paraphrases and **1** misinterpretation. Topology was more typical for the PVs containing light verbs (L 3/7 vs. H 1/8) and the same was observed with compositionality (L 3/7 vs. H 2/8). Lexical determination occurred only with the PVs containing heavy verbs (L 0/7 vs. H 2/8). Paraphrases were also more typical for the PVs containing heavy verbs (L 1/7 vs. H 2/8). Misinterpretations occurred only with the PVs containing heavy verbs.

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the answer for **go out** ('stop burning'), the participant uses the *in* vs. *out* juxtaposition and tries to include the meaning – “if something is burning inside a house it might be easier to extinguish it if you take it outside”. The verb is not used here and *take* is not a synonym of *go*. This is a **topological answer**.

In the answer for **break in** ('wear something until it is comfortable'), the participant says that “the phrase suggests you want to enter somewhere even if you can't”. That is not what this PV means. Also, there is no *break* or *in* here. This is a **misinterpretation**.

In the answer for *take out* ('obtain an official document or a service'), the participant explains the context first – “to get official documents or services you have to go to a government office” and then “you have to get something out of there”. A synonym for *take* is used to explain the particle – *get + out*. This is a **compositional answer**.

In the answer for *call in* ('make a short visit, usually on the way to another place'), the participant compares this type of a visit to a *phone call* – “it could be like calling someone but you are with them...like calling them from their own house”. There is no *in* here, only *from*. However, we cannot say that only the verb *call* is explained. Thus, this is a **paraphrase**.

And, in the answer for *put out* ('injure your back, shoulder, hip etc. '), the participant says – “put out makes me think of something that is out of place”. The verb is not mentioned here at all. The emphasis is on the particle. This is a **topological answer**.

**Here are all 5 of the answers:**

- 1) *go out* ('stop burning') – **TOP** – “if something is burning inside a house it might be easier to extinguish it if you take it outside”
- 2) *break in* ('wear something until it is comfortable') – **MIS** – “the phrase suggests that you want to enter somewhere even if you can't”
- 3) *take out* ('obtain an official document or a service') – **CMP** – “to get official documents or services you have to go to a government office, in a way you have to get something out of there”
- 4) *call in* ('make a short visit, usually on the way to another place') – **PPH** – “it could be like calling someone but you are with them; it could be like calling them from their own house”
- 5) *put out* ('injure your back, shoulder, hip etc. ') – **TOP** – “put out makes me think of something that is out of place”

The second 5 PVs include 3 PVs with light verbs and 2 PVs with heavy verbs.

In the answer for *go in* ('become hidden'), the participant uses the verb to explain the particle and includes the meaning – “you go inside somewhere to be safe”. This is a **topological answer**.

In the answer for *put out* ('extinguish, stop from burning'), the participant uses the *in* vs. *out* juxtaposition and the same analogy as in the answer for *go out* ('stop burning') – “you take something out...if something is burning indoors it is possible that on the outside the fire would extinguish”. *Take* is a synonym for *put*. This is a **compositional answer**.

In the answer for *pull in* ('attract people in large numbers'), the participant explicitly explains only the verb – “pull makes you think of someone forcing people to get somewhere”. There is no particle here. This is a **lexical answer**.

In the answer for *cut out* ('prevent something from reaching somewhere'), the participant uses a *tumor scenario* in which only the verb is explained – “if a body has a tumor, the tumor is cut so it can't get bigger”. The meaning is included because if you *cut a tumor* presumably 'you prevent it from reaching something', like other parts of your body. However, there is no *out* here so this is a **lexical answer**.

In the answer for *put in* ('officially make a claim for something'), the participant again first explains the context just like in PV no. 3 *take out* ('obtain an official document or a service') – “if there is an official claim for something there must be paperwork and people must deal with the government office”. The participant then goes on to say – “it is like bringing something inside those places”. A synonym for the verb is used to explain the particle – *bring + out*. This is a **compositional answer**.

**Here are all 5 of the answers:**

- 6) *go in* ('become hidden') – **TOP** – “you go inside somewhere to be safe”
- 7) *put out* ('extinguish, stop from burning') – **CMP** – “it makes me think that you take something out like if something is burning indoors it is possible that on the outside the fire would extinguish”
- 8) *pull in* ('attract people in large numbers') – **LEX** – “the word pull makes you think of someone forcing people to get somewhere”
- 9) *cut out* ('prevent something from reaching somewhere') – **LEX** – “if a body has a tumor, the tumor is cut so it can't get bigger”
- 10) *put in* ('officially make a claim for something') – **CMP** – “if there is an official claim for something there must be paperwork and people must deal with government office; it is like bringing something inside those places”

The third part of this set includes 4 PVs with heavy verbs and 1 PV with a light verb.

In the answer for *break out* ('become covered in something, like in sweat or rash'), the participant explains that this PV – “sounds somewhat violent” like “something is coming out of you”. Another verb is used to explain the particle, but there is no *break* here. This is a **topological answer**.

In the answer for *shut in* ('trap or injure something by closing something tightly around it'), the participant uses a synonym to explain *shut* and then goes on to explain *in* –

“shut in suggests that something is closed and that something else is inside of it”. This is a **compositional answer**.

In the answer for *draw out* (‘make something last longer’), the participant says – “it makes me think of someone drawing outside a certain limit”. It is clear that the first meaning of the verb is used here. Like *drawing with a pencil*, etc. The particle is also included in the explanation – the action of *drawing* is happening *outside of a certain limit*. As mentioned previously in the analysis of PVs containing the verb *draw*, this was an unexpected explanation of *draw out*. However, we cannot ignore the spatial aspect that is included. Thus, this is a **compositional answer**.

In the answer for *break in* (‘get somebody accustomed to something new’), the participant says – “it sounds as if you are forcing someone to enter somewhere”. The explanation is similar to the one for the PV no. 8 – *pull in* (‘attract people in large numbers’), but there the emphasis was on the verb. Here, *enter somewhere* is a fancy way of saying *go into something*. However, the verb and the particle are not really explained. This is a **paraphrase**.

In the answer for *put out* (‘make a figure or a result wrong’), the participant says – “it makes me think of something that is not where it should be”. The verb and the particle are not explained here. This is a **paraphrase**.

**Here are all 5 of the answers:**

- 11) *break out* (‘become covered in something, like in sweat or rash’) – **TOP** – “break out sounds somewhat violent, as if something is coming out of you”
- 12) *shut in* (‘trap or injure something by closing something tightly around it’) – **CMP** – “shut in suggests that something is closed and that something else is inside of it”
- 13) *draw out* (‘make something last longer’) – **CMP** – “it makes me think of someone drawing outside a certain limit”
- 14) *break in* (‘get somebody accustomed to something new’) – **PPH** – “it sounds as if you are forcing someone to enter somewhere”
- 15) *put out* (‘make a figure or a result wrong’) – **PPH** – “it makes me think of something that is not where it should be”

2.3.2.3.1.2 SET 2

In the second set of answers there are also 7 PVs containing light verbs and 8 PVs containing heavy verbs. There were **4** topological answers, **5** compositional answers, **4** lexical, and **2** paraphrases. Topology occurred equally with both types of PVs (L 2/7 vs. H

2/8). Compositionality occurred more with the PVs containing light verbs (L 4/7 vs. H 1/8). Lexical determination occurred only with the PVs containing heavy verbs (L 0/7 vs. H 4/8). Paraphrases occurred equally with both types of PVs (L 1/7 vs. H 1/8).

The first 5 PVs include 3 PVs with light verbs and 2 with heavy verbs.

In the answer for *go out* ('stop being fashionable'), the participant says that *go out* means "something is leaving a place...considered trendy". The verb or the particle are not explained here – *leaving a place* in a way stands for *go out*. Thus, this is a **paraphrase**.

In the answer for *pull in* ('move to the side of the road to stop'), the participant first explains the context and that – "in the side of the road there is usually a space where a car can stop if it needs to". And then the verb is used to explain the particle – "if you have to stop you...pull your car into that space". This is a **topological answer**.

In the answer for *call out* ('ask somebody to come and help you when there is an emergency'), the participant explains only the particle and the context, but there is no mention of the verb – "the word out is used because you need the help of someone who is out of trouble". This is a **topological answer**.

In the answer for *take in* ('deceive, make somebody believe something that is not true'), both the verb and the particle are explained. The participant first says – "it makes me think of placing something somewhere" and then goes on to say – "in this case you want someone to be in a place where there is a lie". *Take* is *to place*, and *in* is *in a place/lie*. This is a **compositional answer**.

In the answer for *put out* ('make somebody go to sleep or unconscious'), the participant uses a synonym of *put* to explain *out* – "placing someone out of a place of consciousness or awareness". This is a **compositional answer**.

**Here are all 5 of the answers:**

- 16) *go out* ('stop being fashionable') – **PPH** – "go out implies that something is leaving a place; in this case it could be like leaving a place in what is considered trendy"
- 17) *pull in* ('move to the side of the road to stop') – **TOP** – "in the side of the road there is usually a space where a car can stop if it needs to, if you have to stop you would [sic] pull your car into that space"
- 18) *call out* ('ask somebody to come and help you when there is an emergency') – **TOP** – "I think that the word out is used because you need the help of someone who is out of trouble"

19) **take in** ('deceive, make somebody believe something that is not true') – **CMP** – “it makes me think of placing something somewhere; in this case you want someone to be in a place where there is a lie”

20) **put out** ('make somebody go to sleep or unconscious') – **CMP** – “it also makes me think of placing someone out of a place of consciousness or awareness”

In the second 5 PVs, there are 3 PVs with heavy verbs and 2 PVs with light verbs.

In the answer for **draw in** ('become dark earlier as winter approaches'), the participant focuses only on the verb and uses a synonym (*pull*) to explain it in the context of the given meaning – “the word draw makes me think of the sun being pulled by something so that darkness can come”. Unlike in the answer no. 13, here *draw* is not used in its first meaning, but rather in the expected meaning. This is a **lexical answer**.

In the answer for **shut out** ('refuse to allow a person to share your thoughts, feelings etc. '), the participant first explains the verb using a synonym – “you express that you are closing yourself”, and then goes on to say that “the word out suggests...someone has not been allowed to enter...as if you have locked yourself inside a box”. This is **compositionality**.

In the answer for **call in** ('send for somebody professional and official'), the participant explains the meaning – “you need someone to come to you and help you, they need to get to where you are”. There is no *call* or *in* here. This is a **paraphrase**.

In the answer for **put out** ('broadcast, publish or issue'), the participant uses a synonym for *put* to explain the particle – “you place something outside for the public to reach”. This is a **compositional answer**.

In the answer for **take in** ('understand and absorb something'), the participant says – “you let something get inside your head”. There is no *take* here; *get* is used to explain the particle. However, if you have to *let* it, it means it needs your permission and that in itself shows us that the participant took the verb (action) into consideration when answering. Thus, this is a **compositional answer**.

**Here are all 5 of the answers:**

21) **draw in** ('become dark earlier as winter approaches') – **LEX** – “the word draw makes me think of the sun being pulled by something so that darkness can come”

22) **shut out** ('refuse to allow a person to share your thoughts, feelings etc. ') – **CMP** – “with shut you express that you are closing yourself and the word out suggests that someone has not been allowed to enter; it's as if you have locked yourself inside a box”



- 23) *call in* ('send for somebody professional and official') – **PPH** – “you need someone to come to you and help you, they need to get to where you are”
- 24) *put out* ('broadcast, publish or issue') – **CMP** – “you place something outside for the public to reach”
- 25) *take in* ('understand and absorb something') – **CMP** – “you let something get inside your head”

The third part of this set includes 3 PVs with heavy verbs and 2 PVS with light verbs.

In the answer for *cut out* ('stop doing something'), the first association is *cutting*. The participant mentions the action using *a string scenario* and then explains only the verb – “the action that you are doing is a string and then it is suddenly cut”. This is a **lexical answer**.

In the answer for *go in* ('be understood'), the participant uses the verb to explain the particle – “you go inside someone's range of understanding”. This is a **topological answer**.

In the answer for *put out* ('switch something off'), the participant uses the verb *put* to explain the particle *out* (or *in*) for the first time in the questionnaire – “you put something out of service”. Previously, synonyms like *bring* and *place* were used instead of *put*, with the exception of PV no. 5 where only the particle was explained. We will see that from this point on *put* is always used to explain the particle. This is a **topological answer**.

In the answer for *cut in* ('interrupt somebody's conversation'), similarly to the answer for the PV no. 26 *cut out*, the first association is *cutting*, and *the conversation is a thread* (previously *the action* was represented by *a string*) – “someone's conversation is a thread and you cut it if you need to interrupt”. The particle is not explained. This is a **lexical answer**.

In the answer for *break out* ('begin suddenly'), the participant puts emphasis on the verb – “you break a period of doing nothing”. There is no particle here. Previously the answers for PVs containing the verb *break* included – a misinterpretation, topology, and a paraphrase, but from this point on they are strictly lexical. This is a **lexical answer**.

**Here are all 5 of the answers:**

- 26) *cut out* ('stop doing something') – **LEX** – “it is as if the action that you are doing is a string and then it is suddenly cut”
- 27) *go in* ('be understood') – **TOP** – “you go inside someone's range of understanding”
- 28) *put out* ('switch something off') – **TOP** – “you put something out of service”
- 29) *cut in* ('interrupt somebody's conversation') – **LEX** – “someone's conversation is a thread and you cut it if you need to interrupt”
- 30) *break out* ('begin suddenly') – **LEX** – “you break a period of doing nothing”

### 2.3.2.3.1.3 SET 3

In the last set of answers there are 6 PVs with light verbs and 9 PVs with heavy verbs. There were **5** topological answers, **5** compositional answers, **3** lexical, **1** paraphrase, and **1** misinterpretation. Topology occurred only with the PVs containing light verbs (L 5/6 vs. H 0/9). Compositionality occurred only with the PVs containing heavy verbs (L 0/6 vs. H 5/9). Lexical determination occurred only with the PVs containing heavy verbs (L 0/6 vs. H 3/9). Paraphrases also occurred only with the PVs containing heavy verbs (L 0/6 vs. H 1/9). Misinterpretations occurred only with the PVs containing light verbs (L 1/6 vs. H 0/9).

The first 5 PVs of this set include 2 PVs with light verbs and 3 PVs with heavy verbs.

In the answer for *put in* ('spend time or effort doing something'), the verb is used to explain the particle – "you put your time and your mind into something". This is **topology**.

In the answer for *draw out* ('make somebody feel less nervous or shy'), the participant uses a synonym for *draw* to explain the particle – "you pull someone out of a nervous state". This is a **compositional answer**.

In the answer for *break out* ('escape'), the participant focuses on the verb – "you break whatever is keeping you trapped". This is a **lexical answer**.

In the answer for *put in* ('elect a political party as the government'), the participant first explains what happens "when someone is elected" and that "they start working in a government office", and then the verb is used to explain the particle – "they are put in there". This is a **topological answer**.

In the answer for *cut out* ('stop working'), similarly to the answer for the PV no. 26 *cut out* and no. 29 *cut in*, the first association is *cutting* and just like in the PV no. 29, the participant here uses a *thread analogy* and borrows its meaning ('interrupt a conversation') – "you interrupt a continuous action, like cutting a thread". The particle is not explained here. This is a **lexical answer**.

**Here are all 5 of the answers:**

31) *put in* ('spend time or effort doing something') – **TOP** – "you put your time and your mind into something"

32) *draw out* ('make somebody feel less nervous or shy') – **CMP** – "you pull someone out of a nervous state"

33) *break out* ('escape') – **LEX** – "you break whatever is keeping you trapped"

34) *put in* ('elect a political party as the government') – **TOP** – "when someone is elected they start working in a government office so they are put in there"

35) *cut out* ('stop working') – **LEX** – “you interrupt a continuous action, like cutting a thread”

The next 5 PVs include 1 PV with a light verb and 4 PVs with heavy verbs.

In the answer for *take in* ('make a piece of clothing narrower or tighter'), the participant does not seem to understand the meaning – “if someone wants their pants to be shorter they roll them down; they take the fabric in”. The participant probably wanted to say – *roll them up*. Nevertheless, this is a **misinterpretation**.

In the answer for *pull out* ('stop being involved in something'), the participant uses a synonym for *pull* to explain the particle – “you get yourself out of a place where you don't want to be”. This is a **compositional answer**.

In the answer for *break in* ('interrupt a conversation'), the participant focuses on the verb – “you break something that is continuous and solid”. This is a **lexical answer**.

In the answer for *write out* ('write something and include all the necessary information'), the participant says – “you write something” and you do that “to leave all the doubts out”. The participant does not really explain *write out* here. We could say that if you *leave all the doubts out*, you *include all the necessary information*. *Write* is explained, but it is also in the given meaning. Thus, we consider this to be a **paraphrase**.

In the answer for *call in* ('make a public request for a product to be returned'), the participant explains the verb first and then the particle – “you call someone so a product can be inside again”. This is a **compositional answer**.

**Here are all 5 of the answers:**

36) *take in* ('make a piece of clothing narrower or tighter') – **MIS** – “if someone wants their pants to be shorter they roll them down; they take the fabric in”

37) *pull out* ('stop being involved in something') – **CMP** – “you get yourself out of a place where you don't want to be”

38) *break in* ('interrupt a conversation') – **LEX** – “you break something that is continuous and solid”

39) *write out* ('write something and include all the necessary information') – **PPH** – “you write something to leave all the doubts out”

40) *call in* ('make a public request for a product to be returned') – **CMP** – “you call someone so a product can be inside again”

In the third part of this set, and in the last 5 answers of the questionnaire, there are 3 PVs with light verbs and 2 PVs with heavy verbs and they switch back and forth.

In the answer for *put in* ('interrupt'), the participant uses the verb to explain the particle – "I imagine someone putting something inside something", and then goes on to give the context – "therefore changing the order of things". This is a **topological answer**.

In the answer for *shut out* ('stop something from entering'), the first association is to mention *a door* – "you shut a door" and then "someone is left outside". This is a **compositional answer**.

In the answer for *put out* ('make trouble, problems, extra work'), the participant uses the verb to explain the particle – "you put something out of order". This is **topology**.

In the answer for *write in* ('write to ask or complain'), the participant explains *write* and then uses another verb to explain *in* – "you write something that you need to get inside a complaint office". This is a **compositional answer**.

And, finally, in the answer for *take out* ('kill somebody'), the participant uses *reverse viewing* to explain this PV – "it is a common belief that a person's soul comes out of their body". And then the verb is used to explain the particle using the given meaning – "when someone kills someone they take their soul out". This is a **topological answer**.

**Here are all 5 of the answers:**

- 41) *put in* ('interrupt') – **TOP** – "I imagine someone putting something inside something and therefore changing the order of things"
- 42) *shut out* ('stop something from entering') – **CMP** – "you shut a door and someone is left outside"
- 43) *put out* ('make trouble, problems, extra work') – **TOP** – "you put something out of order"
- 44) *write in* ('write to ask or complain') – **CMP** – "you write something that you need to get inside a complaint office"
- 45) *take out* ('kill somebody') – **TOP** – "it is a common belief that a person's soul comes out of their body, when someone kills someone they take their soul out"

**2.3.2.3.1.4 Discussion and Conclusions: Questionnaire 3 – verbal answers**

In conclusion, most of the answers in this questionnaire were topological (**13/45**), compositional (**15/45**), and lexical (**9/45**). There were **6** paraphrases and **2** misinterpretations.

Topology was present in all three parts of the questionnaire (4/15; 4/15; 5/15). It occurred primarily with the PVs containing light verbs (L 3/7 vs. H 1/8; L 2/7 vs. H 2/8; L 5/6 vs. H 0/9). Compositionality was also present in all three parts of the questionnaire (5/15; 5/15; 5/15) and it occurred more with the PVs containing heavy verbs (L 3/7 vs. H 2/8; L 4/7

vs. H 1/8; L 0/6 vs. H 5/9). Lexical determination was present in all three parts of the questionnaire as well and it occurred only with the PVs containing heavy verbs (L 0/7 vs. H 2/8; 0/7 vs. 4/8; L 0/6 vs. 3/9). It occurred with the verbs – *cut*, *break*, *draw*, and *pull*.

Paraphrases were also present in all three parts of questionnaire (3/15; 2/15; 1/15). However, they were more common in the first part of the questionnaire and occurred more with the PVs containing heavy verbs (L 1/7 vs. H 2/8; L 1/7 vs. H 1/8; L 0/6 vs. H 1/9). Misinterpretations occurred in the first and third part of the questionnaire and among both types of PVs (L 1/5 vs. H 1/9).

Taking all of this into consideration, we can say that there is a slight *topological shift* occurring with the PVs containing light verbs in the third part of the questionnaire. In the first two parts of the questionnaire, less than half of the PVs containing light verbs were explained using topology (L 3/7; L 2/7), whereas in the third part of the questionnaire, almost all the answers were topological (L 5/6). To be more precise, the shift occurs in the third part of the second set. Among the PVs containing light verbs, the shift is most visible with *put in/out*. From the answer no. 27 on, *put* is always used to explain the particle. Before that the answers about *put in/out* were mostly compositional. There is very little topology with the PVs containing heavy verbs and by the third part of the questionnaire – there is none (H 1/8; H 2/8; H 0/9).

Exactly the opposite was observed with compositional answers. There is a *compositional shift* among the PVs containing heavy verbs in the third part of the questionnaire. In the first two parts of the questionnaire, there is very little compositionality among the PVs containing heavy verbs (H 2/8; H 1/8), whereas in the third part of the questionnaire, more than half of the answers were explained using compositionality (H 5/9). By the third part of the questionnaire, there was no compositionality among the PVs containing light verbs. It was also interesting to see that in many compositional answers only a synonym of the verb was used to explain the particle, e.g. *put* was *place*, *draw* was *pull*, and *pull* was *get*. The participant usually avoided explaining the verb and the particle separately.

When it comes to lexical determination and paraphrases, there was a shift visible here as well. The answers for the PVs questionnaire containing the verbs – *call*, *pull*, and *write* were lexical or paraphrases in the beginning of the and then gradually became compositional in the second or the third part of the questionnaire.

However, with the verb *break* the opposite occurred. In the second part of the questionnaire, a *lexical shift* occurs – the participant suddenly decided to explain only the verb *break* and ignore the particle *in/out*. The verb *cut* might have played a role in that. The

PVs containing *cut* were lexical throughout the questionnaire and in the last 5 answers of the second set there were 2 PVs with *cut* and then one with *break* – this is where the answers about *break in/out* become lexical.

As far as the PVs with *shut* go, the answers were compositional throughout the questionnaire. And with the PVs containing the verb *draw*, it was noticed that when it was in combination with the particle *out* the answers were compositional, and the one with *in* was lexical. In compositional answers, the participant once used *draw* in its first meaning, and once *pull* as a synonym.

### 2.3.2.3.2 Pictorial representations: Questionnaire 3

In the pictorial representations, there were **9** topological drawings, **10** compositional drawings, **11** lexical drawings, **13** visual paraphrases and **2** misinterpretations.

To be more precise, topology was more typical for the PVs with light verbs (L 7/20 vs. H 2/25). Compositionality also occurred more with the PVs containing light verbs (L 6/20 vs. H 4/25). However, lexical determination occurred predominantly with the PVs containing heavy verbs (L 1 vs. H 10). Visual paraphrases occurred more with the PVs with heavy verbs (L 5 vs. H 8). Misinterpretations occurred equally with both types of PVs (L 1/20 vs. H 1/25).

For the analysis to be clearer, the questionnaire was divided into **3 sets of drawings** – each containing **15 drawings**. Each set was then separated into **groups of 5**.

The participant tried to include a textual explanation of certain parts of the drawing to make sure we understood what was meant to be shown. That usually did not include the verb, but it sometimes did include the particle.

#### 2.3.2.3.2.1 SET 1

In the first set of drawings there are 7 PVs containing light verbs, and 8 PVs containing heavy verbs. There were **2** topological drawings, **4** compositional drawings, **3** lexical drawings, and **6** visual paraphrases. Topology occurred only with the PVs containing light verbs (L 2/7 vs. H 0/8). Compositionality occurred equally with both types of PVs (L 2/7 vs. H 2/8). Lexical determination occurred more with the PVs containing heavy verbs (L 1/7 vs. H 2/8). Paraphrases were also more typical for the PVs containing heavy verbs (L 2/7 vs. H 4/8).

The first 5 PVs switch back and forth between the PVs with light and heavy verbs.

In the drawing of ***go out*** ('stop burning'), *fire* is personified – it has *legs* and behind it there is *a door*. However, there are no arrows here to show us the direction of the action. The only thing we do see is the verb *go* – *the legs* stand for *go*. This is **a lexical drawing**.

In the drawing of **break in** ('wear something until it is comfortable'), there is *a big foot* and *an arrow* pointing towards *a small shoe* – this is *in*. However, this is not entirely correct. On the one hand, you would not normally put on a pair of shoes that is too small for your feet and then *wear it until it is comfortable*. On the other hand, the drawing is spatial – it does include *a foot going into a shoe*. However, taking into consideration this ambiguity and the verbal answer that was categorized as a misinterpretation ("the phrase suggests you want to enter somewhere even if you can't"), we do not consider this to be topological nor a misinterpretation, but **a visual paraphrase**.

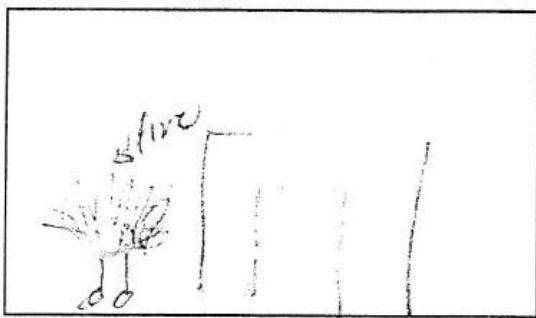
In the drawing of **take out** ('obtain an official document or a service'), *a person is taking out a driver's licence*. There are two images. The first one is on the right side and it includes *a person is in an office and at a counter* getting "a driver's licence" (it is written in the drawing). In the second image, on the left side, *a person is standing at the door*, about to *go out* and s/he is holding *a driver's licence* – this is *take*. The participant sometimes draws *out* as going from *the right to the left* side. This is **a compositional drawing**.

The drawing of **call in** ('make a short visit, usually on the way to another place') includes *a phone call*. There are *two people having a conversation over the phone*, but they are *in the same place* denoted as *the house*. However, there is no direction – *in* here. This is **a lexical drawing**.

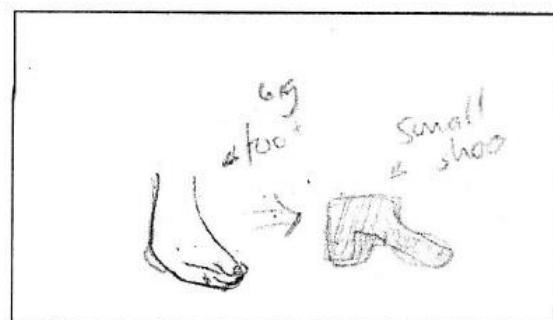
And in the drawing of **put out** ('injure your back, shoulder, hip etc. '), there is *a person with an injured shoulder*. This is written in the drawing. *The person is also not smiling* because s/he is presumably in pain. This is **a visual paraphrase**.

**Here are all 5 of the drawings:**

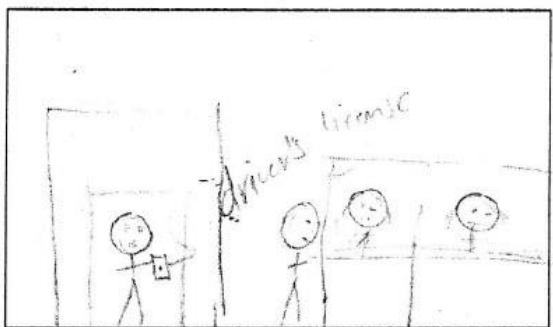
1) **go out** ('stop burning') – **LEX**



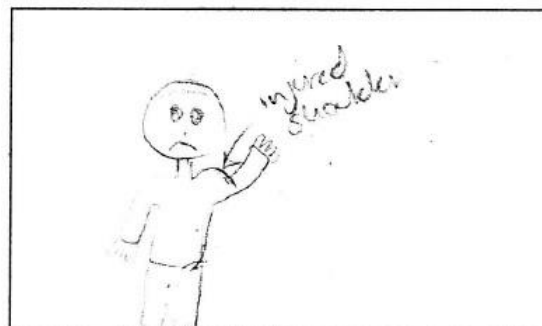
2) **break in** ('wear something until it is comfortable') – **PPH**



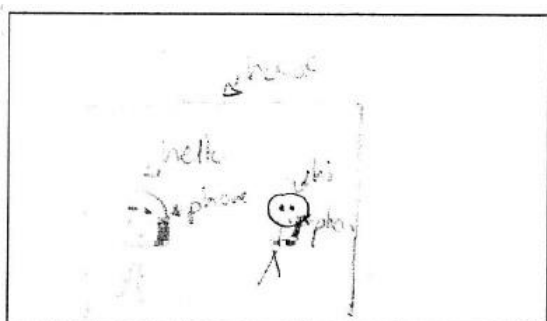
- 3) **take out** ('obtain an official document or a service') – **CMP**



- 5) **put out** ('injure your back, shoulder, hip etc.') – **PPH**



- 4) **call in** ('make a short visit, usually on the way to another place') – **LEX**



The second 5 PVs include 3 PVs containing light verbs and 2 with heavy verbs.

The drawing of **go in** ('become hidden') includes *a box* and *a person* in it – only *the head* is visible. And *the person's eyes* are looking *down*. Presumably this is supposed to be *hidden*. There is no *go* or *in* here. This is a **visual paraphrase**.

In the drawing of **put out** ('extinguish, stop from burning'), there is *a person taking the fire out of the house*. *The fire* is first visible *in the window of the house* and *an arrow* is pointing *out of the house*. *The person* is now *extinguishing the fire* and then *the fire has stopped burning*. This is a **compositional drawing**.

The drawing of **pull in** ('attract people in large numbers') includes *a person pulling people into a circus using a rope*. There is a place denoted as "a circus". Direction of the action is not shown by an arrow, but by *the person* doing *the pulling* – *his/her hand* is pointing towards *the door of the place* denoted as *a circus*. This is a **compositional drawing**.

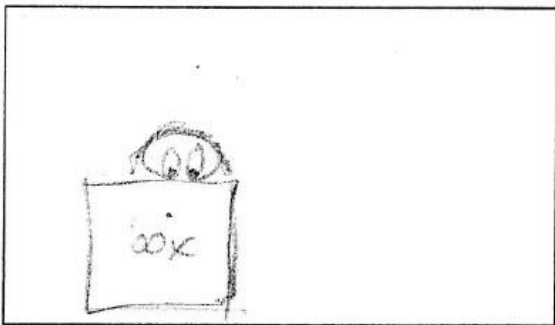
In the drawing of **cut out** ('prevent something from reaching somewhere'), there is *a person* and *his/her hand* is detached. Direction is not denoted in any way and the meaning is not visible here. Presumably, *the hand has been cut* even though the process is not shown. We consider this to be a **lexical drawing**.



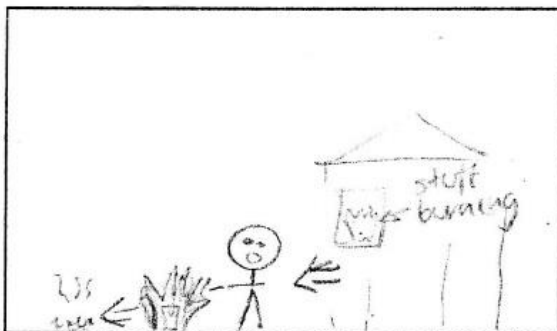
The drawing of **put in** ('officially make a claim for something') includes *a paper going into an office*. The participant drew a piece of paper denoted as *paper* and *an arrow* pointing towards *the door of a place* denoted as "office". This is the first **topological drawing** of the questionnaire.

Here are all 5 of the drawings:

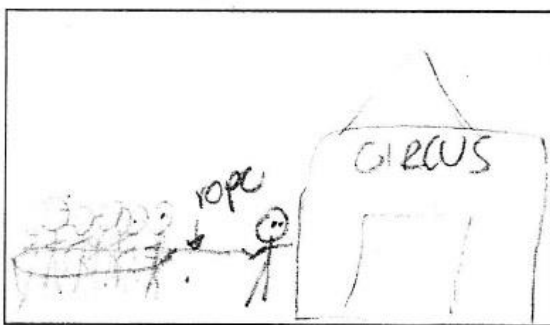
6) **go in** ('become hidden') – **PPH**



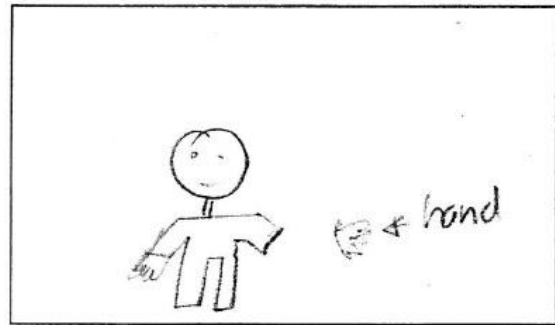
7) **put out** ('extinguish, stop from burning') – **CMP**



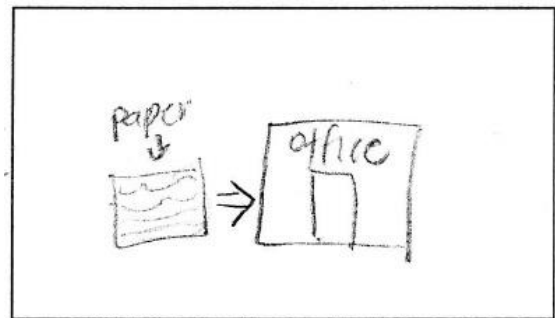
8) **pull in** ('attract people in large numbers') – **CMP**



9) **cut out** ('prevent something from reaching somewhere') – **LEX**



10) **put in** ('officially make a claim for something') – **TOP**



The third part of this set of PVs includes 4 PVs with heavy and 1 with a light verb.

The drawing of **break out** ('become covered in something, like in sweat or rash') includes *a person with a rash on his/her face*. There is no *break* or *out* here, only the meaning is visible. This is a **visual paraphrase**.

The drawing of **shut in** ('trap or injure something by closing something tightly around it') includes *a hand trapped in the door*. The process of *shutting* or *in* are not visible. This is a **visual paraphrase**.

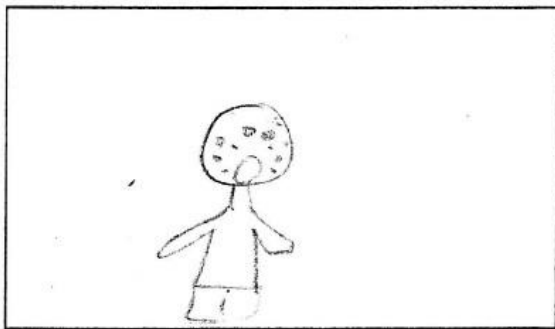
The drawing of **draw out** ('make something last longer') includes the process of *drawing on a piece of paper and outside of it*. There is *a piece of paper* denoted as *paper* that also represents the *in* domain and there is *a line* denoted as "drawing". The line continues *outside* of the paper. This is also mentioned in the verbal answer (*drawing outside a certain limit*). Thus, this is a **compositional drawing**.

The drawing of **break in** ('get somebody accustomed to something new') includes *a place with a door on it and 2 people standing next to it*. "Break in" is written above the head of the person on the right side. What this really means is 'get somebody accustomed to something new'. There is no direction showing us where *in* is and there is no *break*. This is a **visual paraphrase**.

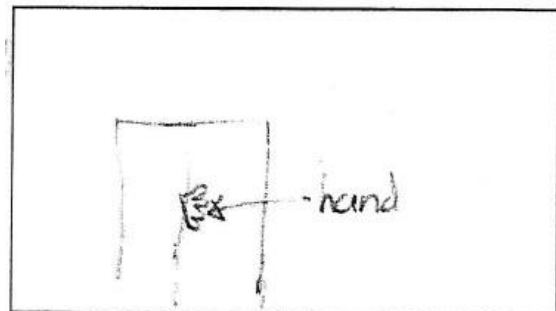
And, in the drawing of **put out** ('make a figure or a result wrong'), *a piece of paper is going/went out of the results box*. The arrow going *out* of the box is showing us the direction. There is no *put* here. This is a **topological drawing**.

**Here are all 5 of the drawings:**

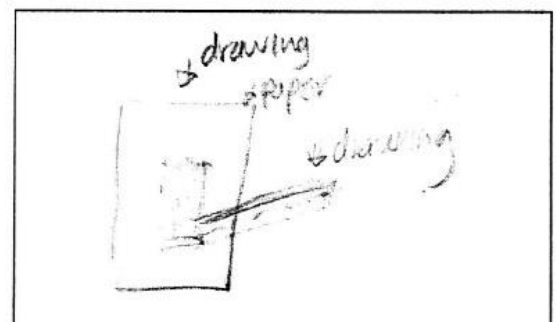
11) **break out** ('become covered in something, like in sweat or rash') – **PPH**



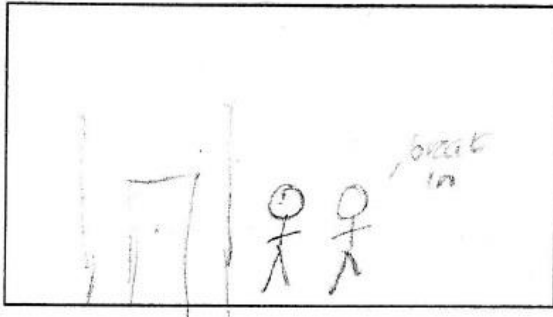
12) **shut in** ('trap or injure something by closing something tightly around it') – **PPH**



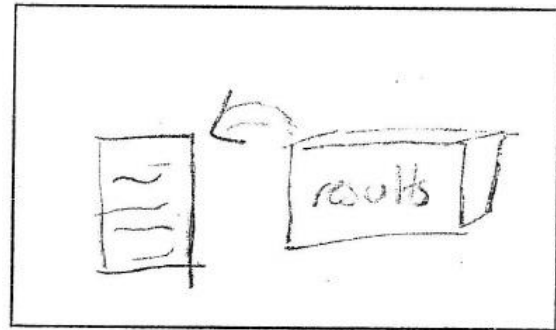
13) **draw out** ('make something last longer') – **CMP**



14) **break in** ('get somebody accustomed to something new') – PPH



15) **put out** ('make a figure or a result wrong') – TOP



#### 2.3.2.3.2.2 SET 2

In the second set of drawings there are also 7 PVs with light verbs and 8 PVs with heavy verbs. There were **4** topological drawings, **3** compositional drawings, **5** lexical drawings, and **3** visual paraphrases. Topology occurred only among the PVs with light verbs (L 4/7 vs. H 0/8). Compositionality was also more typical for the PVs containing light verbs (L 2/7 vs. H 1/8). Lexical determination occurred only with the PVs containing heavy verbs (L 0/7 vs. H 5/8). Paraphrases occurred equally among both types of PVs (L 1/7 vs. H 2/8).

The first 5 PVs include 3 PVs with light verbs and 2 with heavy verbs.

In the drawing of **go out** ('stop being fashionable') *a piece of clothing is out of the closet*. There is *an arrow* pointing from *the closet* towards *the piece of clothing*. *Out* is written above the piece of clothing. The motion is not visible here (see 2.3.1.1.1.5 for the previously explained problematic of the verb *go* in drawings). This is a **topological drawing**.

The drawing of **pull in** ('move to the side of the road to stop'), includes *a car on the side of the road*. There is no *pull* or *in* here. The only thing that is visible is the meaning. This is a **visual paraphrase**.

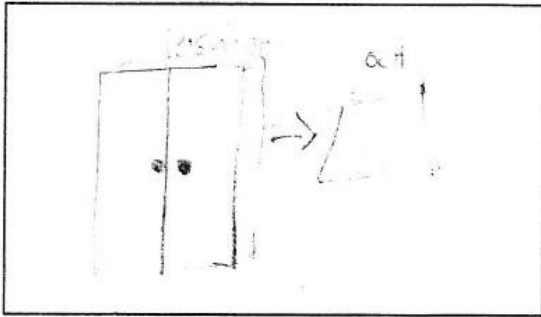
In the drawing of **call out** ('ask somebody to come and help you when there is an emergency'), there is *a person in a danger sphere saying: "help!"* (*a speech bubble*) and *another person is outside* (*out* is written next to him/her). The speech bubble represents *call*. The drawing is very similar to the next one (*take in*). The only difference is the written *out*. This is a **compositional drawing**.

The drawing of **take in** ('deceive, make somebody believe something that is not true') is similar to the previous one – *a person is in a lie sphere saying: "come" to the person outside*. The verb *come* is a synonym for *take* in this case and is also showing us the direction – *in*. This is a **compositional drawing**.

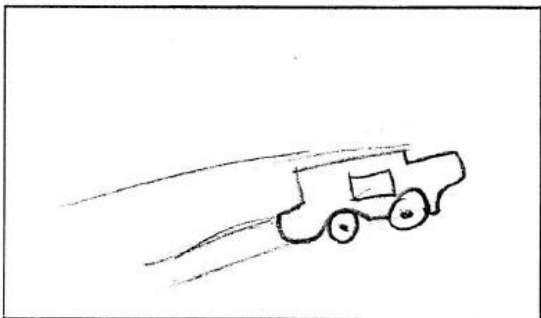
The drawing of **put out** ('make somebody go to sleep or unconscious') includes a person who is out of the consciousness sphere. There is an arrow denoted as *out* pointing out of the consciousness sphere. On the other end is an unconscious person. There is no *put* here. This is a **topological drawing**.

Here are all 5 of the drawings:

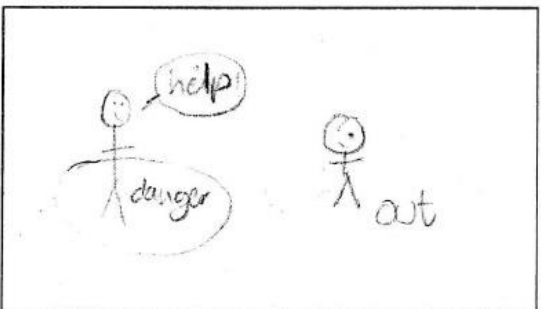
16) **go out** ('stop being fashionable') – **TOP**



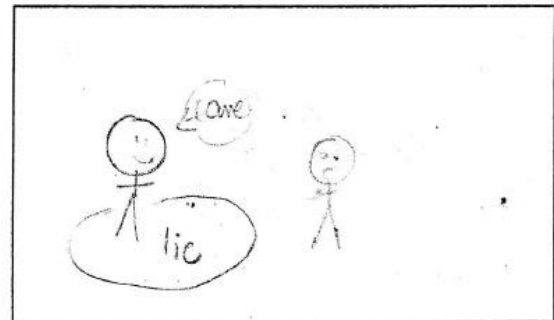
17) **pull in** ('move to the side of the road to stop') – **PPH**



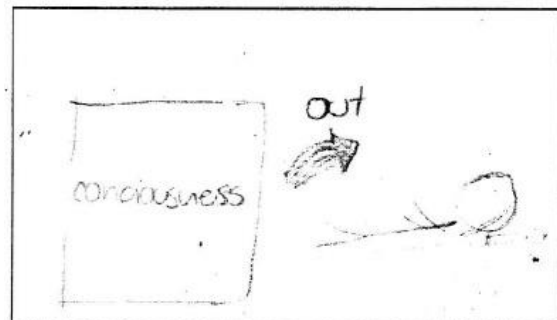
18) **call out** ('ask somebody to come and help you when there is an emergency') – **CMP**



19) **take in** ('deceive, make somebody believe something that is not true') – **CMP**



20) **put out** ('make somebody go to sleep or unconscious') – **TOP**



The second 5 PVs include 3 PVs with heavy verbs and 2 PVs with light verbs.

In the drawing of **draw in** ('become dark earlier as winter approaches'), *the sun is being drawn/pulled using a rope*. There is *rope* around *the sun*. The participant wrote *rope* and *sun* in the drawing. We cannot see who is doing the action. There is no *in* here, only *draw* is visible. This is a **lexical drawing**.

In the drawing of *shut out* ('refuse to allow a person to share your thoughts, feelings etc. '), there is a *person in a closed box* saying: "closed" (*speech bubble*) and a *person outside* with "let me in" written next to him/her. There is no connection between the two spheres, only the *in vs. out* juxtaposition is visible and that *the box is shut/closed*. This is not just a visual paraphrase because the participant emphasized the verb by writing – *closed* in the drawing. This is a **lexical drawing**.

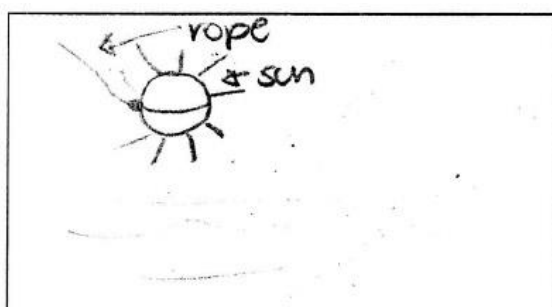
The drawing of *call in* ('send for somebody professional and official') includes a *person inside a house* with "I need help" written above him/her and a *person on the outside* with "I'm coming!" written above him/her. There is no arrow showing us the connection between *in vs. out*. This is a **visual paraphrase**.

The drawing of *put out* ('broadcast, publish or issue') includes a *pile of magazines* and *3 people coming to take one*. The participant is showing us what happens when something is broadcast/published/issued. There is no *put* or *out* here. This is a **visual paraphrase**.

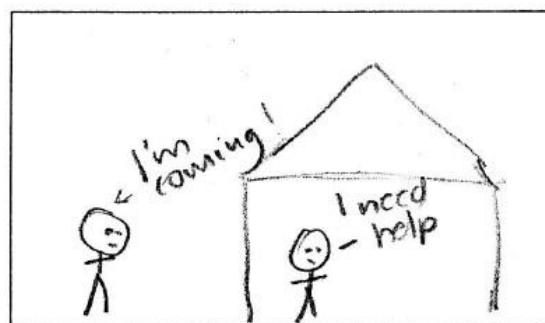
The drawing of *take in* ('understand and absorb something') includes a *paper going into a person's head*. There is an arrow pointing towards the person's head with *in* written above it to clarify where *the paper* is going – *into the person's head*. This is a **topological drawing**.

**Here are all 5 of the drawings:**

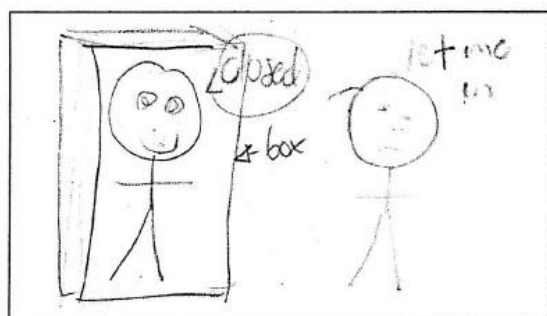
21) *draw in* ('become dark earlier as winter approaches') – **LEX**



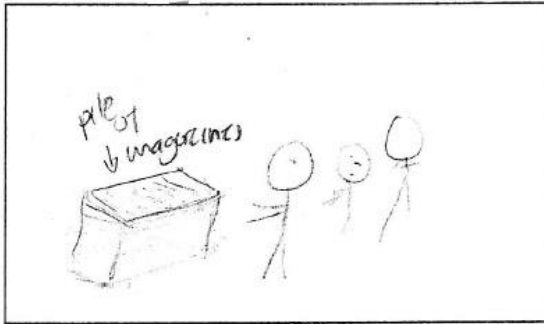
23) *call in* ('send for somebody professional and official') – **PPH**



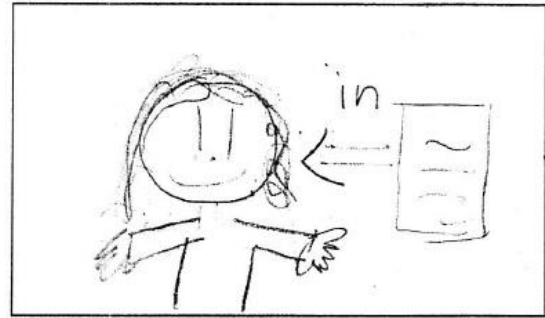
22) *shut out* ('refuse to allow a person to share your thoughts, feelings etc. ') – **LEX**



24) **put out** ('broadcast, publish or issue') – PPH



25) **take in** ('understand and absorb something') – TOP



The third part of this set includes 3 PVs with heavy verbs and 2 PVs with light verbs.

In the drawing of **cut out** ('stop doing something'), there is a *wire-like line* denoted as *action* and *being cut with a knife*. There is no *out* here, only the verb is visible. This is a **lexical drawing**.

In the drawing of **go in** ('be understood'), *words one person is saying are going into the other person's head*. There are 2 *arrows* denoted as "words" going towards *the other person's head*. This person then says: "I get it!". There is both *motion* and *in* here. This is a **compositional drawing**.

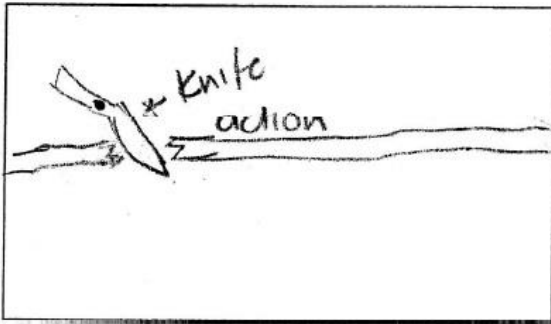
The drawing of **put out** ('switch something off') includes the *before* and *after* images. Both show some kind of *a device*. In the first image, "service" is written above *the device*. In the second one, "out of service" is written above *the device*. There is an arrow between the two spheres. If "out of service" was not written in the drawing, this would be considered a visual paraphrase. However, the participant made sure we understood *out* was explained. The verb is not visible. Thus, this is a **topological drawing**.

The drawing of **cut in** ('interrupt somebody's conversation') includes *a person cutting a conversation between two people*. *The conversation between the two people* is shown by a *thread*. *The third person* is holding *scissors* and *cutting the thread of the conversation*. There is no *in* here. This is a **lexical drawing**.

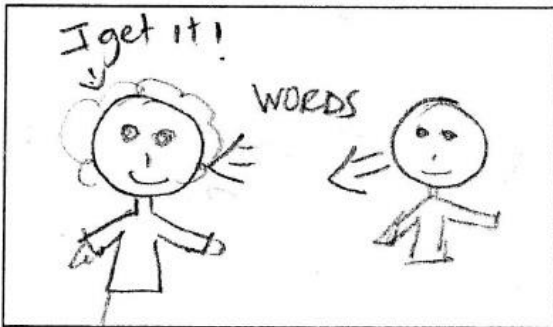
In the drawing of **break out** ('begin suddenly'), *the person is breaking the wall of doing nothing*. *The wall of doing nothing* is broken into 2 parts and *the person is in-between*. Only the process of *breaking* is visible. This is a **lexical drawing**.

**Here are all 5 of the drawing:**

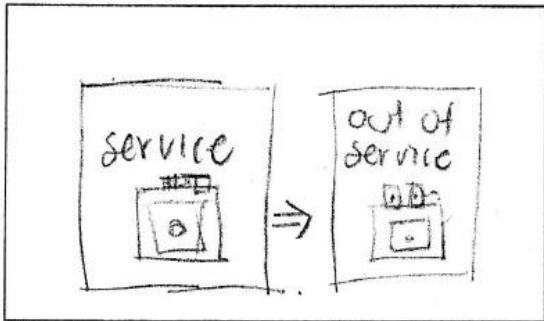
26) *cut out* ('stop doing something') –  
**LEX**



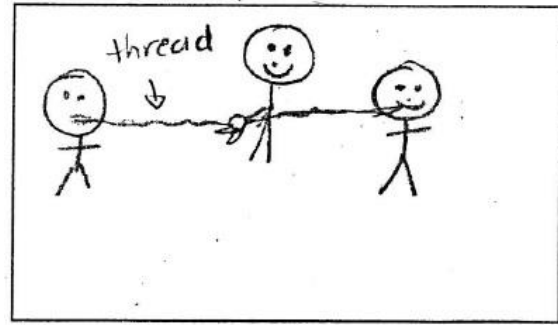
27) *go in* ('be understood') – **CMP**



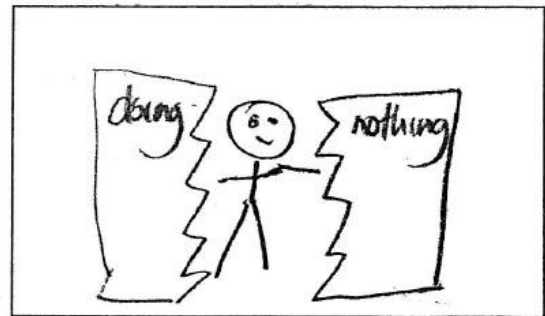
28) *put out* ('switch something off') –  
**TOP**



29) *cut in* ('interrupt somebody's  
 conversation') – **LEX**



30) *break out* ('begin suddenly') –  
**LEX**



### 2.3.2.3.2.3 SET 3

In the third set of drawings there are 6 PVs with light verbs and 9 PVs with heavy verbs. There were 3 topological drawings, 3 compositional drawings, 3 lexical drawings, 4 visual paraphrases, and 2 misinterpretations. Topology occurred more with the PVs containing heavy verbs (L 1/6 vs. H 2/9). Compositionality occurred more with the PVs containing light verbs (L 2/6 vs. H 1/9). Lexical determination occurred only with the PVs with heavy verbs (L 0/6 vs. H 3/9). Paraphrases occurred equally with both types of PVs (L 2/6 vs. H 2/9). Misinterpretations occurred equally with both types of PVs (L 1/6 vs. H 1/9)

The first 5 PVs of this set include 2 PVs with light verbs and 3 PVs with heavy verbs.

The drawing of **put in** ('spend time or effort doing something') includes *a person putting time into work*. The person is holding a clock ("time" is written below it) and an arrow is pointing from it towards *the work* represented by "a box". There is both *put* and *in* here. This is a **compositional drawing**.

The drawing of **draw out** ('make somebody feel less nervous or shy') includes *a person being drawn/pulled out of a nervous atmosphere by the person on the outside*. A circle represents "the nervous atmosphere" and *the person* in it has "a rope" wrapped around him/her. This *rope* is *drawn/pulled* by *the person on the outside*. If someone is *drawing/pulling* you, you inevitably go in their direction. In this case, that means going *out of the nervous atmosphere circle*. This is a **compositional drawing**.

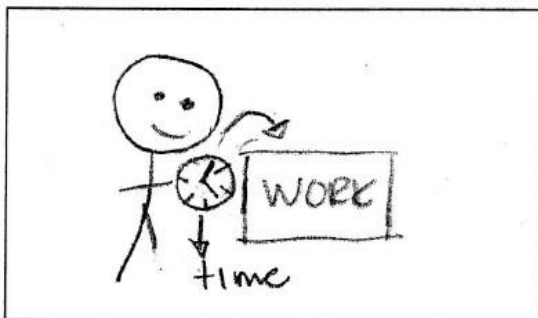
In the drawing of **break out** ('escape'), *a person broke a chain*. The person is holding *one half of the chain* in each hand. Only *break* is visible here. This is a **lexical drawing**.

In the drawing of **put in** ('elect a political party as the government'), *a political party is going into the government office*. An arrow is going from "the logo" of a political party towards *the door of the government office – in*. There is no *put* here. This is **topology**.

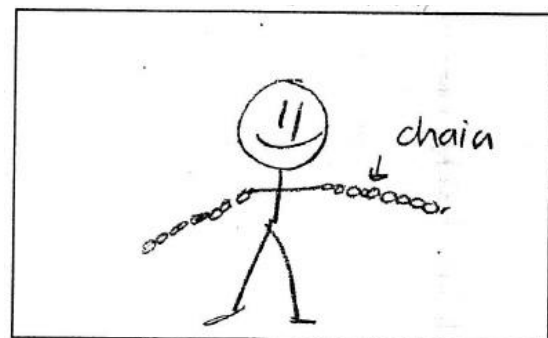
The drawing of **cut out** ('stop working') includes *a person holding "an action" that is cut by a knife*. The action is *cut in half*. There is no *out* here, only the verb is visible. This is a **lexical drawing**.

Here are all 5 of the drawings:

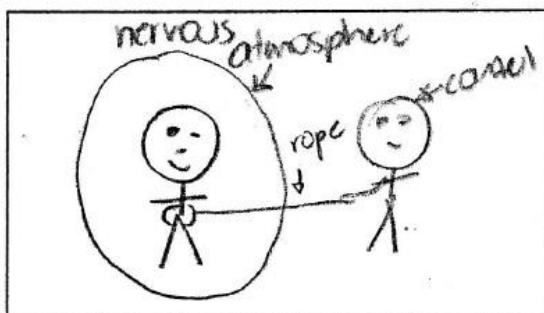
31) **put in** ('spend time or effort doing something') – **CMP**



33) **break out** ('escape') – **LEX**

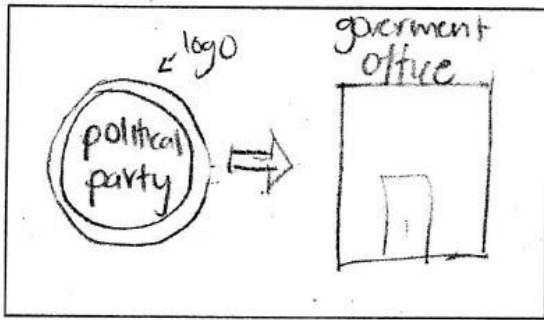


32) **draw out** ('make somebody feel less nervous or shy') – **CMP**

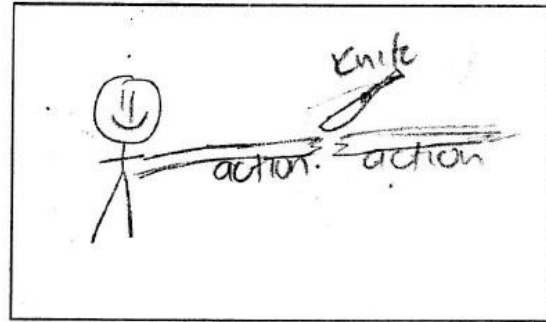




34) **put in** ('elect a political party as the government') – **TOP**



35) **cut out** ('stop working') – **LEX**



The second part of this set includes 1 PV with a light and 4 PVs with heavy verbs.

The drawing of **take in** ('make a piece of clothing narrower or tighter') includes *a pair of pants with one pant leg rolled up*. There is no *take* or *in* here and the meaning is wrong. Thus, this is a **misinterpretation**.

In the drawing of **pull out** ('stop being involved in something'), *a person went out of some situation*. There is an arrow going out of the sphere of "some situation" and the person is now *out*. There is no *pull* here. This is a **topological drawing**.

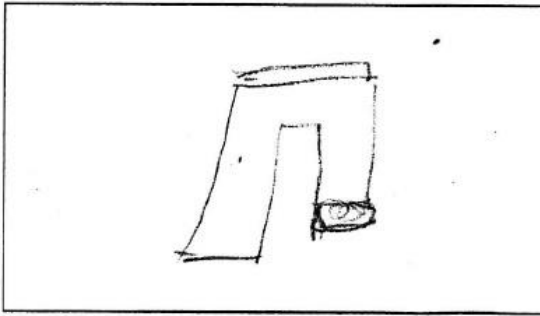
In the drawing of **break in** ('interrupt a conversation'), *a person is breaking a conversation between two people using a baseball bat*. The conversation is represented by a (broken) board and arrows going from one person to the other. Above them is *the third person holding a baseball bat and breaking the board of the conversation*. There is no *in* here, just *break*. This is a **lexical drawing**.

In the drawing of **write out** ('write something and include all the necessary information'), there is *a piece of paper denoted as information and an arrow pointing to the words "bye bye doubts"*. The participant does not really explain *write out* here. What is visible is *the information* mentioned in the meaning of this PV. Thus, this is a **visual paraphrase**.

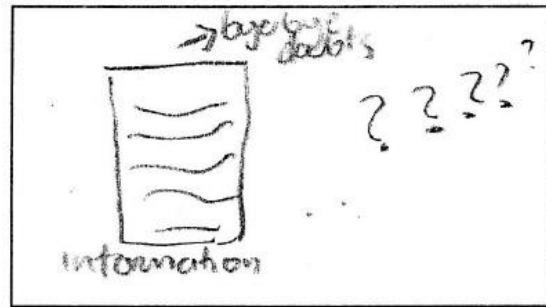
The drawing of **call in** ('make a public request for a product to be returned') includes *a conversation between a customer and a store employee in which the customer is saying: "I called you because I need this to be inside the store again"*. This is a **misinterpretation**.

**Here are all 5 of the drawings:**

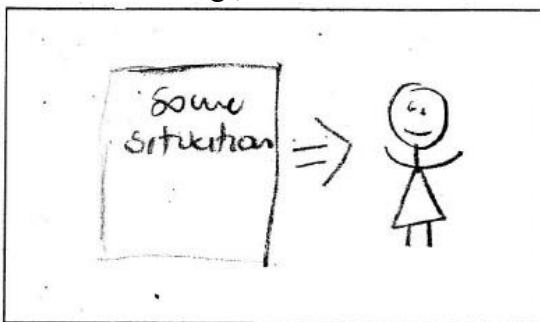
36) **take in** ('make a piece of clothing narrower or tighter') – **MIS**



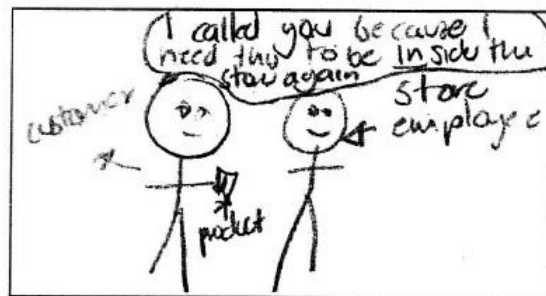
39) **write out** ('write something and include all the necessary information') – **PPH**



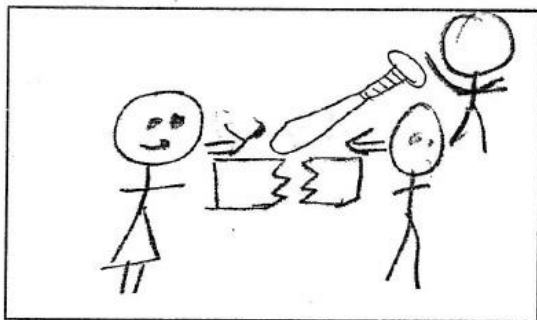
37) **pull out** ('stop being involved in something') – **TOP**



40) **call in** ('make a public request for a product to be returned') – **MIS**



38) **break in** ('interrupt a conversation') – **LEX**



In the third part of this set, and in the last 5 drawings of the questionnaire, there are 3 PVs with light verbs and 2 PVs with heavy verbs and they switch back and forth.

In the drawing of **put in** ('interrupt'), there are 3 images. In the first one, there are *jenga-like blocks*. In the second one, there is *a person* and "person who put something in" is written below him/her. And in the last one, *another block* is in the middle of the blocks. The action is not visible, and *put* and *in* are not explained. This is a **visual paraphrase**.

The drawing of **shut out** ('stop something from entering') includes *a person not letting a dog into the house*. The person says: "don't let the dog in!". The process of *shutting* or *out* are not visible here. This is a **visual paraphrase**.

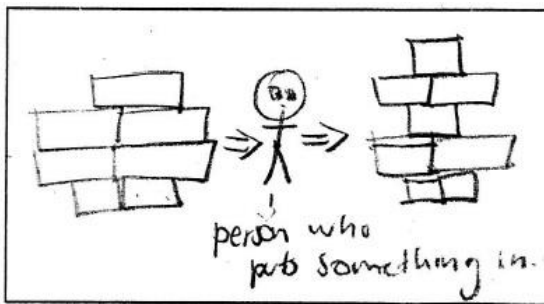
The drawing of **put out** ('make trouble, problems, extra work'), includes 2 images. In the first one, *two people* are in "the order bubble". An arrow is pointed to the person on the right. In the second image, *the person* is now *out* and "someone put him out" is written above. There is no arrow between *the order bubble* and the person on the outside. The text lets us know what was meant to be shown – both the verb and the particle. This is **compositionality**.

In the drawing of **write in** ('write to ask or complain'), "a complaint" is going *into the box of complaints*. This is a **topological drawing**.

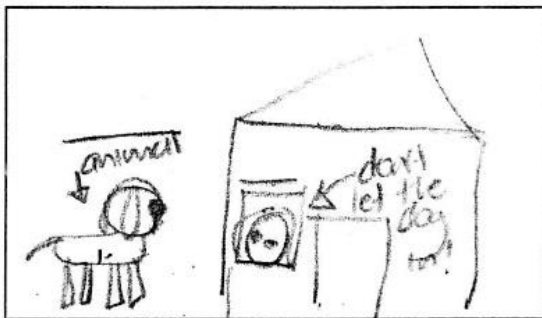
In the drawing of **take out** ('kill somebody'), *a person's soul is leaving his/her body* (reverse viewing). *The person* is lying on the floor – *dead* and surrounded by "blood". *The person's soul* is above the body. *Take* or *out* are not visible here. This is a **visual paraphrase**.

Here are all 5 of the drawings:

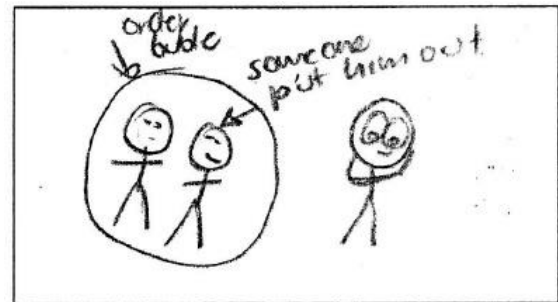
41) **put in** ('interrupt') – PPH



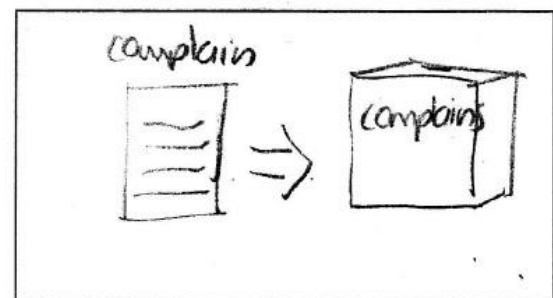
42) **shut out** ('stop something from entering') – PPH



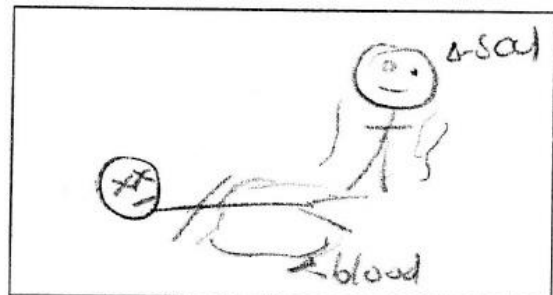
43) **put out** ('make trouble, problems, extra work') – CMP



44) **write in** ('write to ask or complain') – TOP



45) **take out** ('kill somebody') – PPH



#### 2.3.2.3.2.4 Discussion and Conclusions: Questionnaire 3 – pictorial representations

Most drawings in this questionnaire were topological (9/45), compositional (10/45), and lexical (11/45). There were 13 paraphrases and 2 misinterpretations.

Topology was present in all three parts of the questionnaire (2/15; 4/15; 3/15) and it occurred primarily with the PVs containing light verbs (L 2/7 vs. H 0/8; L 4/7 vs. H 0/8; L 1/6 vs. H 2/9). There was no topology among the PVs containing heavy verbs in the first and second part of the questionnaire. It was observed only in the third part of the questionnaire.

Compositionality was also present in all three parts of the questionnaire (4/15; 3/15; 3/15) and it also occurred more with the PVs containing light verbs (L 2/7 vs. H 2/8; L 2/7 vs. H 1/8; L 2/6 vs. H 1/9).

Lexical drawings occurred in all 3 parts of the questionnaire and primarily with the PVs containing heavy verbs (L 1/7 vs. H 2/8; L 0/7 vs. H 5/8; L 0/6 vs. H 3/9). It occurred with the verbs – *cut*, *break*, *draw*, *call*, and *shut* but also with the light verb *go* as well.

Visual paraphrases were also present in all three parts of the questionnaire (6/15; 3/15; 4/15) and they occurred more with the PVs containing heavy verbs (L 2/7 vs. H 4/8; L 1/7 vs. H 2/8; L 2/6 vs. H 2/9). Misinterpretations occurred only in the third part of the questionnaire and among both types of PVs (L 1/5 vs. H 1/9).

Taking all of this into consideration, we can say that there is a slight and sudden *topological shift* occurring in the second and third part of the questionnaire. However, unlike in the verbal answers, here it occurs only in the second set with the PVs containing light verbs (L 2/7, 4/7, 1/6), and in the third set with the PVs containing heavy verbs (H 0/8; 0/8; 2/9).

Unlike in the verbal answers, there is no compositional shift visible in the drawings. There were more compositional drawings with the PVs containing light verbs. However, with both types of PVs compositionality generally stays the same throughout the questionnaire.

In the second part of the questionnaire, just like in the verbal answers, the identical *lexical shift* occurs with the verb *break*. The participant suddenly draws only *break*, ignoring the particles. The verb *cut* might have played a role in that. The drawings of the PVs with *cut* were lexical. In the last 5 drawings of the second set, where 2 PVs with *cut* are, the drawings about *break in/out* become lexical. Unlike in the verbal answers, the drawings of the PVs containing the verbs *call*, *draw*, *pull*, *shut*, and *write* vary throughout the questionnaire.

### 2.3.2.4 Discussion and Conclusions: Case Studies – Questionnaires 1, 2, and 3

In the analysis of Questionnaire 1 (Table 49) it is visible that most of the answers and drawings were topological and compositional. Verbal answers equally included topology and compositionality, while in the drawings there was more compositionality than topology. There is a *topological shift* occurring in the second set of the questionnaire. In the verbal answers it was visible in both the PVs containing light verbs and heavy verbs especially in the second set, while in the drawings it was visible only with the PVs containing light verbs in the second and third set. Compositionality was more typical for the PVs containing heavy verbs. In the verbal answers it occurred the most in the first and second part of the questionnaire, while in the drawings it remained the same throughout the questionnaire. However, unlike in the verbal answers, lexical determination and visual paraphrases do appear in the drawings. Lexical determination occurs only with the PVs containing heavy verbs.

Table 49. Case study: Questionnaire 1 – results

CASE STUDY	QUESTIONNAIRE 1																	
	VERBAL							PICTORIAL										
	T O P	C M P	L E X	P H	M I S	T O P	C M P	L E X	P H	M I S								
SET 1 – L/H	2	-	3	8	-	-	2	-	2	1	2	5	-	2	1	-	2	-
SET 2 – L/H	7	5	-	2	-	-	-	1	5	-	2	6	-	-	-	1	-	1
SET 3 – L/H	5	3	1	6	-	-	-	-	5	1	1	6	-	1	-	1	-	-
RESULTS	14	8	4	16	-	-	2	1	12	2	5	17	-	3	1	2	2	1
	22		20		-	-	3		14		22		3		3		3	
	45							45										

In the analysis of Questionnaire 2 (Table 50) it is visible that most of the answers and drawings were compositional. Verbal answers included only 3 topological answers which occurred with two PVs containing light verbs and one heavy verb (*pull out*). The participant always resorted to explaining both the verb and the particle. This is visible in both the participant's tendencies to explain them separately and generally not using synonyms, but also in the drawings where both the verb and the particle were always written somewhere to make sure we understood what was meant to be shown. Subcategories of compositionality were also introduced – *full* and *partial compositionality*. Partial compositionality referred to those answers and drawings in which the particle was assigned different meanings and was not clearly spatial. This turned out to be more common for the particle – *out*. We also paid special attention to the participant's tendencies to explain the action or the particle first. The particle

was usually explained first in the second set and it was most visible with the PVs containing light verbs. Partial compositionality was not as present in the drawings.

Table 50. Case study: Questionnaire 2 – results

CASE STUDY	QUESTIONNAIRE 2											
	VERBAL						PICTORIAL					
CATEGORIES	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
SET 1	1	14	-	-	-	-	-	14	-	-	1	-
SET 2	-	15	-	-	-	-	-	15	-	-	-	-
SET 3	2	11	-	-	2	-	-	13	-	-	2	-
RESULTS	3	40	-	-	2	-	-	42	-	-	3	-
	45						45					

In the analysis of Questionnaire 3 (Table 51) it is visible that there was more topology and compositionality in the verbal answers than in the drawings. Topology occurred more with the PVs containing light verbs. Compositionality occurred equally with PVs containing light and heavy verbs in the verbal answers, while in the drawings it occurred slightly more with the PVs containing light verbs. Paraphrases occurred more in the drawings than in the verbal answers but in both always more with the PVs containing heavy verbs. There was a *topological*, a *compositional* and a *lexical shift* occurring in the verbal answers. The shifts occurred in the second part of the questionnaire and are most visible in the third set. The *topological shift* occurs with the light verbs, specifically with *put*. The *compositional shift* occurs with the heavy verbs. The *lexical shift* occurs with *break*. In the drawings, there is a very small and sudden *topological shift* with the light verbs but only in the second set, while with heavy verbs it occurs suddenly in the third part of the set. There is no compositional shift. However, the *lexical shift* occurs with *break in* and *break out* in the drawings as well.

Table 51. Case study: Questionnaire 3 – results

CASE STUDY	QUESTIONNAIRE 3											
	VERBAL						PICTORIAL					
CATEGORIES	T O P	C M P	L E X	P P H	M I S	N T	T O P	C M P	L E X	P P H	M I S	N T
SET 1 – L/H	3   1	3   2	-   2	1   2	-   1	2   -	2   2	1   2	2   4	-   -	-   -	-   -
SET 2 – L/H	2   2	4   1	-   4	1   1	-   -	4   -	2   1	-   5	1   2	-   -	-   -	-   -
SET 3 – L/H	5   -	-   5	-   3	-   1	1   -	1   2	2   1	-   3	2   2	1   1	1   1	1   1
RESULTS	10   3	7   8	-   9	2   4	1   1	7   2	6   4	1   10	5   8	1   1	1   1	1   1
	13	15	9	6	2	9	10	11	13	2	2	2
	45						45					

In conclusion, there were 3 different participants that presented different answers and drawings (Table 52). If we compare Questionnaire 1 (Croatian participant) and Questionnaire 3 (Mexican participant), there are some similarities. *Topological shifts* occur in the verbal answers with the PVs containing light verbs. They start appearing or occur only in the second set of verbal answers. In the drawings there is less topology among both participants, but both Questionnaire 1 and Questionnaire 3 include some kind of *a topological shift* among the PVs containing light verbs. It is not as notable in Questionnaire 3. Compositionality occurs among both participants, but significantly more in Questionnaire 1 in both verbal and pictorial representations. In Questionnaire 1 compositionality generally occurs with the PVs containing heavy verbs. However, there is *a compositional shift* in the verbal answers of Questionnaire 3 with the PVs containing heavy verbs. Lexical determination in the verbal answers occurs only in Questionnaire 3, while in the drawings it occurs among both participants, significantly more in Questionnaire 3. Paraphrases occur only in Questionnaire 3, while visual paraphrases occur in both questionnaires, significantly more in Questionnaire 3. Questionnaire 2 (Croatian participant) primarily included compositional answers and drawings but even there it was visible that verbal answers change in the second set and the particles become more important. The participant also assigns more meanings to the particle *out*.

Table 52. Case studies – results

CASE STUDIES	QUESTIONNAIRES 1, 2 & 3											
	VERBAL						PICTORIAL					
CATEGORIES	T O P	C M P	L E X	P H	M I S	N T	T O P	C M P	L E X	P H	M I S	N T
<b>CRO 1</b>	22	20	-	-	3	-	14	22	3	3	3	-
<b>CRO 2</b>	3	40	-	-	2	-	-	42	-	-	3	-
<b>MEX 1</b>	13	15	9	6	2	-	9	10	11	13	2	-

Each participant developed some kind of a strategy in the questionnaire and while those strategies are different, similarities are present and most visible in the participants' approach to the PVs containing light verbs.

### 3. Conclusion

The aim of this thesis was to look at the salience of topology in strategic meaning construal of English particle verbs in the Mexican and the Croats' verbal and pictorial representations. This was a qualitative analysis. Two types of studies were done. The first one focused on particle-verb analysis and the second one focused on individual case studies. The data used in this thesis is a part of the Learner Corpus that was collected by Geld (2009a). The theoretical framework and analytical tools were taken from Geld (2009b). The Learner Corpus consisted of 100 questionnaires but for the purposes of this study a subcorpus of 30 questionnaires was taken and analysed. The questionnaires were selected based on three criteria: L1 of the participants, the participants' English proficiency and the number of given answers in individual questionnaires. There were 15 Croatian and 15 Mexican participants. The categories important for this study were – topological determination, compositional meaning, and lexical determination, but also – (visual) paraphrases and misinterpretations.

There were two hypotheses:

- 1) There will be some qualitative differences in the verbal and pictorial representations between the Croats and the Mexicans.
- 2) We will be able to identify the development of strategic construal in individual participants.

Firstly, the analysis of particle verbs and all their meanings used in the Learner Corpus by Geld (2009a) was presented. PVs containing light verbs and heavy verbs were analysed in this order: *go in, go out, take in, take out, put in, and put out, and call in, call out, cut in, cut out, break in, break out, draw in, draw out, pull in, pull out, shut in, shut out, write in, and write out*. Discussion and conclusions of each analysis were presented in that order as well, followed by discussion and conclusions for the PVs containing light verbs and the PVs containing heavy verbs.

Secondly, three different individual case studies were presented. Each questionnaire was divided into three sets of answers and drawings – each containing 15 answers and 15 drawings and then the sets were divided into groups of 5 answers and 5 drawings. First, we analysed the verbal answers and then the pictorial representations. Discussion and conclusions followed each analysis and, finally, the results of all three case studies were compared.

The results of the particle-verb analysis of the verbal answers show that topology is more likely to occur with the PVs containing light verbs. Most of the answers of both groups were either topological or compositional. Topology occurred almost equally among both



groups. Compositionality occurred equally in the answers for the PVs containing the particle *in*. However, with the particle *out*, the Croats presented significantly more compositional answers, while the Mexicans showed equal tendencies towards compositionality and paraphrasing the meaning. As already mentioned, the particle *out* is more informative than the particle *in*. This was visible in the results of this study as well. The Croats were significantly more likely to assign different meanings to the particle *out*, whereas this was not the case with the particle *in*.

Conversely, topology was less likely to occur with the PVs containing heavy verbs. Compositionality occurred among both groups, but significantly more among the Croats with both the particle *in* and the particle *out*. Lexical determination, in turn, was more likely to occur among the Mexicans. The Croats were once again significantly more likely to assign different meanings to the particle *out*, whereas this was not the case with the particle *in*.

The results of the particle-verb analysis of the pictorial representations varied. When it comes to the PVs containing light verbs, topology and compositionality seem to occur to a lesser extent than in the verbal answers. However, topology occurred more among the Croats than the Mexicans. Compositionality occurred equally among both groups with the particle *in* but, just like in the verbal answers, more among the Croats with the particle *out*. There were no differences between the verbal answers and pictorial representations in terms of lexical determination. Nevertheless, most of the drawings of both groups were visual paraphrases. They occurred more with the particle *out*, especially among the Mexicans.

Similarly, with the PVs containing heavy verbs, topology again occurred more among the Croats than the Mexicans. There were more topological drawings than topological answers among the Croats but only with the particle *in*. The same cannot be said about the Mexicans. There was less topology in the drawings of the particle *out* than in the verbal answers among both groups. Compositionality again occurred more among the Croats. Lexical determination occurred among both groups but more among the Mexicans. It was interesting to see that the Croats showed more tendencies towards lexical determination than in the verbal answers – they were three times more likely to draw lexical content than to give lexical answers. The Mexicans, in turn, presented the same number of lexical drawings as lexical verbal answers with the particle *in*, but more than in the verbal answers with the particle *out*. Unlike in the verbal answers, most pictorial representations were visual paraphrases and with the particle *in* they occurred significantly more among the Mexicans. *Reverse viewing* was noticed in the study as well. It was more likely to occur with the particle *out* and the PVs containing light verbs. It occurred among both groups.

The results of the individual case studies confirm that the development of strategic construal in individual participants does exist. In each questionnaire we identified different strategies, but there were also similarities. In Questionnaire 1 (Croatian participant) the verbal answers and pictorial representations were mostly topological and compositional. There is a topological shift occurring in the second set with the PVs containing light verbs in both the verbal answers and drawings. Compositionality occurred with the PVs containing heavy verbs. There were no lexical answers, but there were lexical drawings. In Questionnaire 2 (Croatian participant) the verbal and pictorial representations were compositional. It is visible that the participant assigned different meanings to the particle *out*. In the verbal answers of Questionnaire 3, there is a topological shift occurring with the PVs containing light verbs, a compositional shift occurring with the PVs containing heavy verbs, but also a lexical shift occurring with the PVs containing the verb *break*. In the drawings of Questionnaire 3, a small topological shift does occur, but what is more significant is the lexical shift.

The hypotheses made at the beginning of the thesis were confirmed. Qualitative differences in the verbal and pictorial representations between the Croats and the Mexicans were found. The findings of the previous research done on this corpus of data that focused on the verbal answers (Geld 2011, Geld & Maldonado 2011) correspond to the findings of this study. Topology is more likely to occur with the PVs containing light verbs, and compositionality and lexical determination is more likely to occur with the PVs containing heavy verbs. In the verbal answers, topology occurs equally among the Croats and the Mexicans, but with the PVs containing light verbs compositionality occurs more among the Croats with the particle *out*, while with the PVs containing heavy verbs compositionality occurs more among the Croats with both *in* and *out*. Lexical determination is more typical for the Mexicans. In terms of pictorial representations, with the PVs containing light verbs there is less topology and compositionality than in the verbal answers. However, topology occurs more among the Croats than among the Mexicans, while compositionality occurs more among the Croats with the particle *out*. The most interesting finding, perhaps, is that, unlike in the verbal answers, with the PVs containing heavy verbs and the particle *in* the Croats presented more topology. Nevertheless, heavy verbs are still more likely to produce compositional and lexical drawings. Lexical determination, in fact, triples among the Croats in the pictorial representations. The case studies analysed in this thesis also confirm the results of the particle-verb analysis.

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## 5. Sažetak

Cilj je ovoga diplomskog rada bio istražiti istaknutost topologije u strateškome konstruiranju značenja engleskih fraznih glagola u verbalnim i slikovnim prikazima Meksikanaca i Hrvata. Provedena je kvalitativna analiza na uzorku od 30 upitnika preuzetih iz Učeničkoga korpusa koji je prikupila Geld (2009a). Teorijski okvir i analitički alati preuzeti su od Geld (2009b). Analiziran je i razvoj strateškoga konstruiranja značenja kod tri sudionika. Stoga, predstavljene su i studije slučaja.

U teorijskome dijelu ovoga rada usredotočit ćemo se na strateško konstruiranje značenja fraznih glagola, prijašnja istraživanja provedena na Učeničkome korpusu (2009a) te donijeti kratak pregled metodologije, kategorija i najbitnijih zaključaka o razlikama između fraznih glagola koji se sastoje od značenjski određenijih i neodređenijih glagola te prijedloga *out* i *in*.

Analiza fraznih glagola donosi se u dva dijela – najprije su proučeni frazni glagoli sa značenjski određenijim glagolima, a zatim oni sa značenjski neodređenijim glagolima. Svaki je frazni glagol analiziran zasebno, pri čemu se donose primjeri verbalnih i slikovnih prikaza. Za ovo je istraživanje relevantno pet kategorija: topološko određenje, kompozicionalnost, leksičko određenje, (vizualne) parafraze i pogrešne interpretacije.

Studije slučaja uključuju upitnike triju sudionika – dva Hrvata i jednoga Meksikanca. Verbalni i slikovni prikazi analizirani su zasebno, nakon čega slijede rasprava i zaključci.

**KLJUČNE RIJEČI:** frazni glagol, značenjski određeniji glagoli, značenjski neodređeniji glagoli, prijedlog *in*, prijedlog *out*, topologija, kompozicionalnost, leksičko određenje, leksički crtež