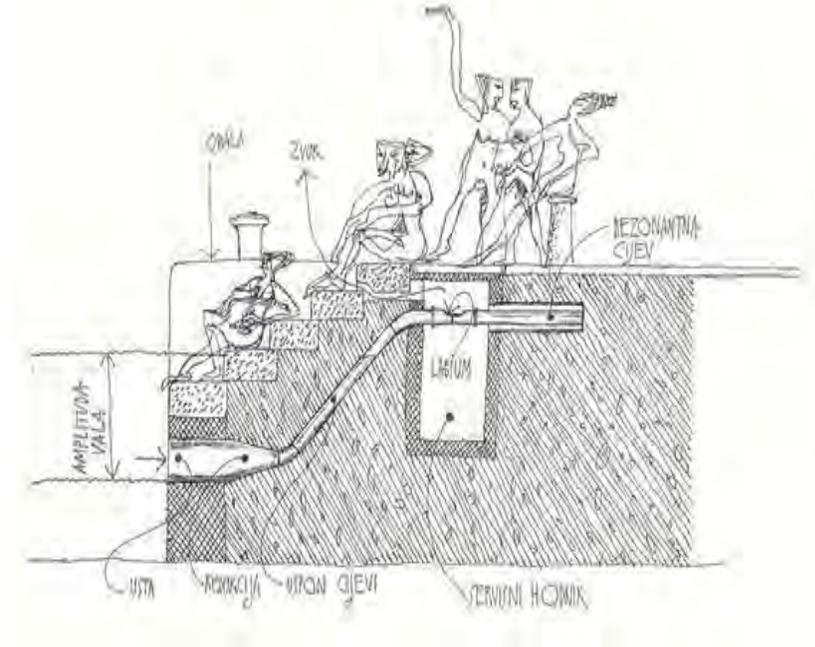


**What it takes to draw
meaning: visual grammar,
conceptual integration, and
strategic meaning construal
in L2 speakers of English**



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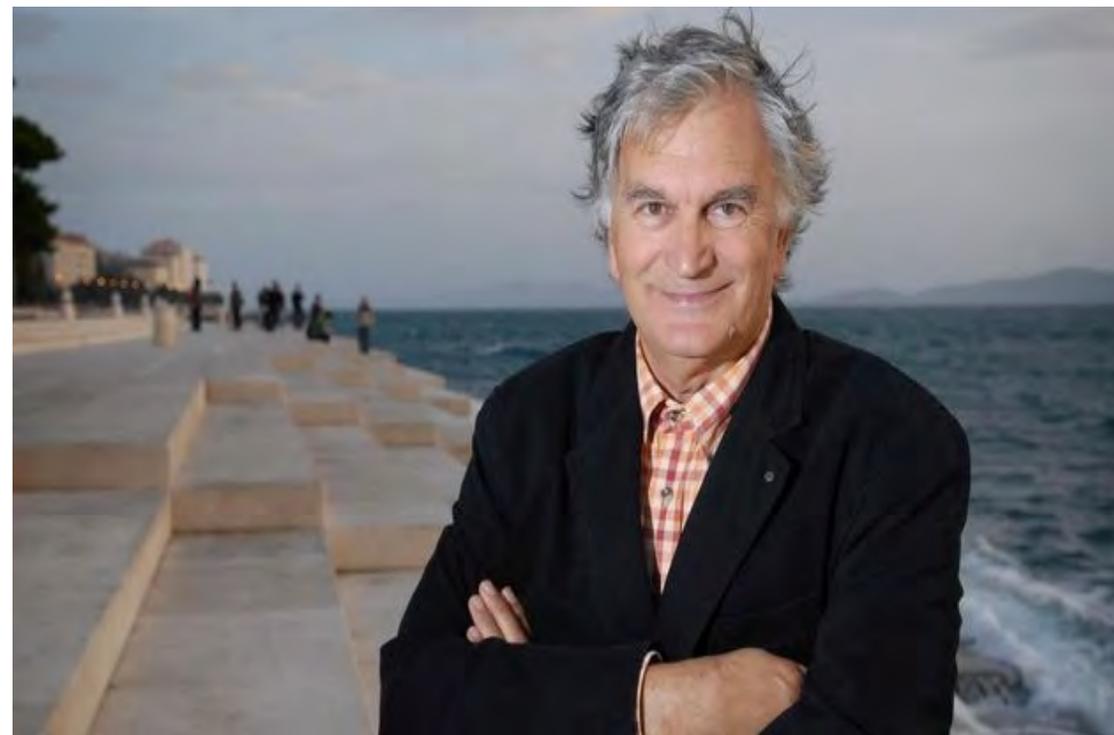








A Memorial to Kornati Firefighters
by **Nikola Bašić**





The Field of Crosses



Nikola Bašić: *context, communication, continuity* (achieving something meaningful)

- all the crosses consist of double dry walls characteristic for the region (1.20 m average height and 0.6 m average width)
- they are all 25.0 m long vertically, and 14.5 m horizontally
- all the crosses are in identical dimensions and shape, but the morphological features of their individual micro location gives them somewhat individualized character that is enhanced by the names, dates of birth and death, quotes and verses selected by friends and family, etc.

The meaning(fulness) achieved, conveyed...

- Functions that pictures serve in text processing (Levin 1987):
 - 1) decorative – e.g. a pine tree attached to a description of a hiking trail
 - 2) representational – e.g. an illustration in a book accurately mirroring part or all the text content
 - 3) organizational – a picture that provides a useful framework for the text content (e.g. an illustrated map, images showing steps in a particular process, etc.)
 - 4) interpretational – a picture clarifying a difficult text (e.g. representing blood pressure in terms of a pump system)

(examples taken from Carney and Levin 2002)

The meaning(fulness) achieved, conveyed...

5) transformational – *...transformational pictures include systematic mnemonic (memory enhancing) components that are designed to improve a reader's recall of text information....*

...information is often recoded to make it more concrete and then related by way of a meaningful, interactive illustration....

(Carney and Levin, p. 7)

- decorative pictures exhibited almost no beneficial text-learning effects, whereas the remaining effect sizes ranged from moderate benefits to quite substantial benefits for transformational pictures

(Levin *et al.* 1987)

Transformational illustration designed to represent details about the fictitious city of Belleview (from Dretzke, 1993, p. 494, as cited in Carney and Levin, 2002, p. 18)



Description of Belleview with five concrete attributes

Belleview is attractively situated at the base on an *inactive volcano*, which last erupted in the eighteenth century. *Hot air balloon rides* provide a thrilling way for visitors to take in the lovely surroundings. A large *automobile museum* in the city boasts to have the best collection of turn-of-the-century classics that can be found in this part of the country. This is also the home of skilled craftsmen known for their *handmade musical instruments*. Every summer, thousands of folks from all over the world come here to compete against the best in an Olympic-style *marathon*.

(Dretzke, 1993, p. 493–494, as cited in Carney and Levin 2002, p. 17)

But, what kind of mnemonics is adequate for acquiring, (re)constructing, and retaining conceptual relations coded by the continuum of lexicon and grammar?

In language:

- we memorize but also construct, re-construct, contextualize;
- linguistic meanings are dynamic.

- How can we illustrate complex meaning(s)?
- How can we illustrate conceptual structure?
- What do we need to know to be able to produce such illustrations?

Visual grammar

continuum of lexicon and grammar & meaning potential

There has been a considerable body of work employing insights from linguistics in describing and analyzing other modes of representation.

The work in question was mostly concerned with lexis, but more recently the attention has been moved to grammar (see Kress and Leeuwen 2006).

>> this idea of representation of grammar is present in our work as well, but also taken a step further:

- **continuum of lexicon and grammar as a fundamental premise of cognitive grammar (Langacker 1987, and elsewhere);**
- **conceptual integration and meaning potential (Fauconnier and Turner 2003, and elsewhere)**

Our data: insights from strategic meaning construal (L2)?

Geld and Stanojević (in press)

- Our idea about finding out what makes effective illustrations:

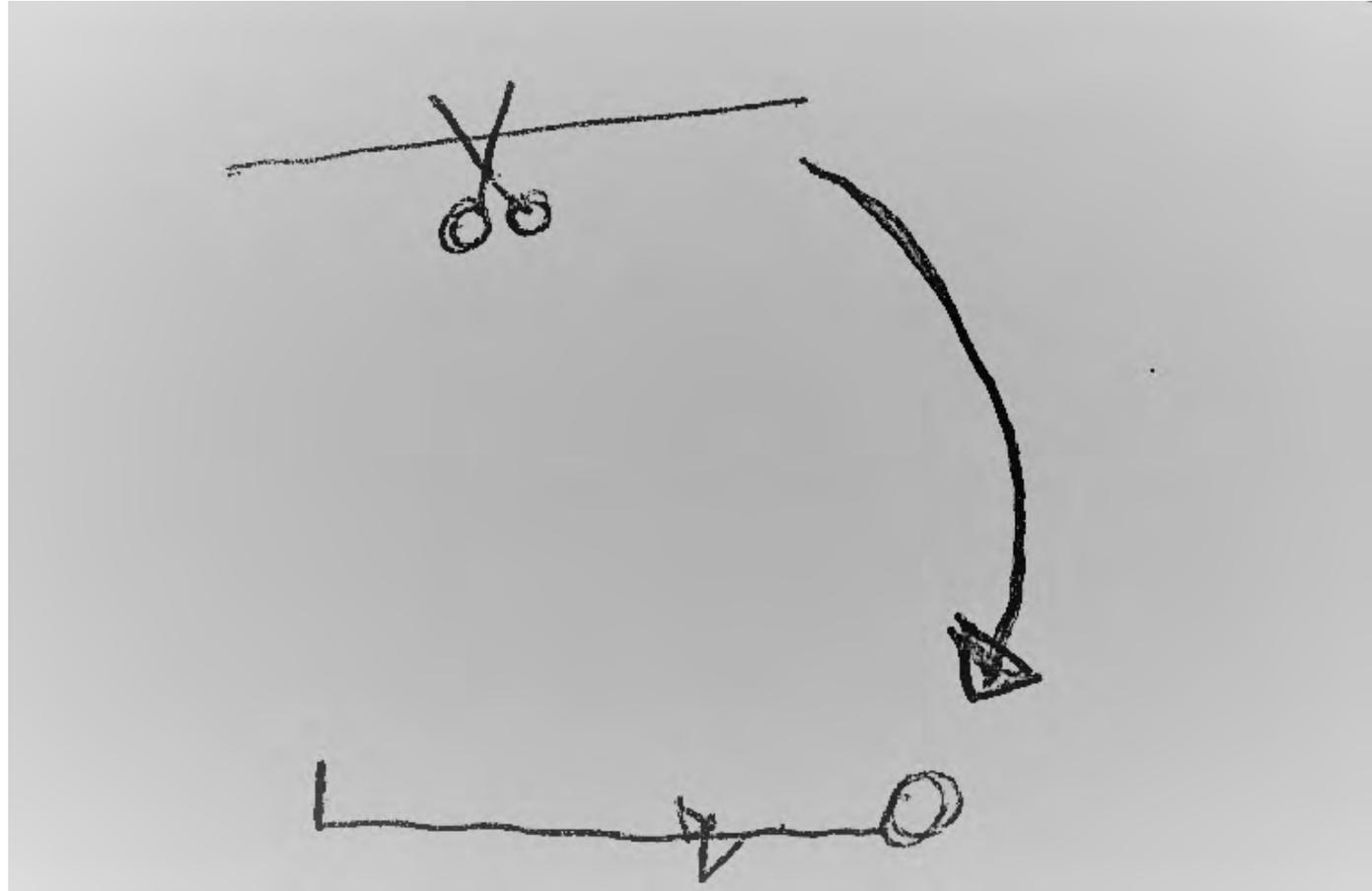
#1 We looked at the strategies of successful learners.

#2 We asked them meaningful questions and gave them tasks that are rooted in a cognitively motivated representation of meaning.

#3 We encouraged them to construct and represent meaning.

Preliminary analysis: 400 drawings (out of more than 4000 from our multimodal learner corpus)

Cognitive engagement and strategic construal task: *cut down* – ‘kill somebody’

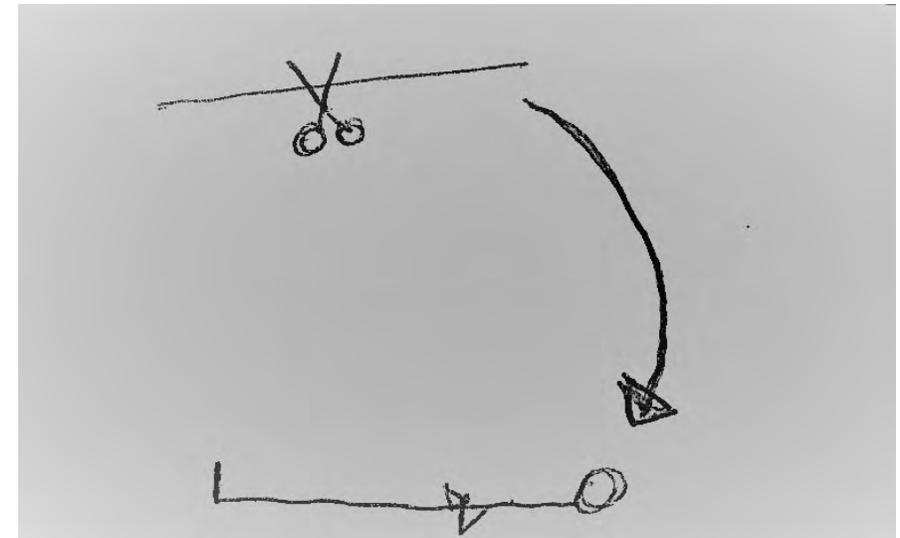


Language (idiomaticity, polisemy, creativity, etc.) - necessity for decomposing, composing, unpacking, re-packing...

(Turner 2014 and elsewhere)

- scissors – safe to say they stand for ‘cutting’
- a thread? a time line? a line representing somebody’s life?
- a curved arrow pointing **down** and suggesting the result?
- a lying stickman probably representing a dead person

- lexis and grammar
- concrete and schematic



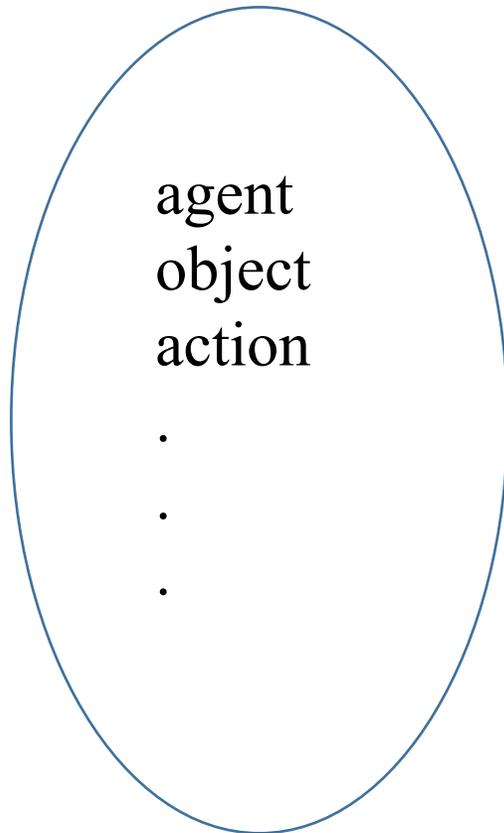
cut down – ‘kill’

meaning potential (Fauconnier and Turner 2003, and elsewhere)

strategic construal (Geld 2009a, and elsewhere)

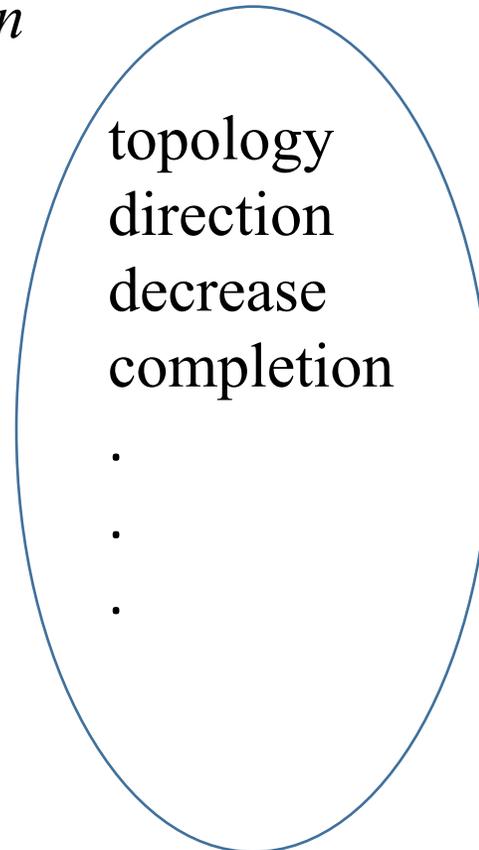
INPUT 1

cut



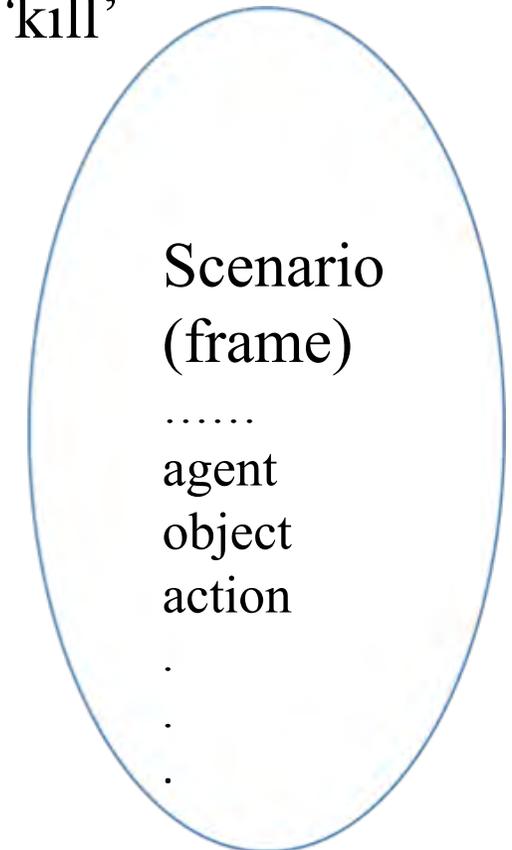
INPUT 2

down



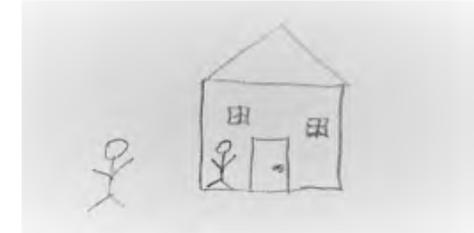
INPUT 3

‘kill’

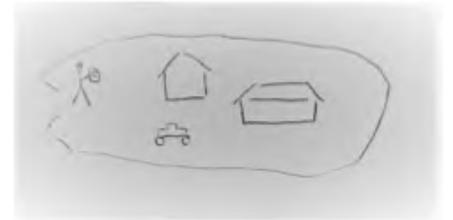


Types of illustrations obtained

1) Literal compositionality



2) Visual paraphrase



3) Partial conceptual integration

4) Full conceptual integration

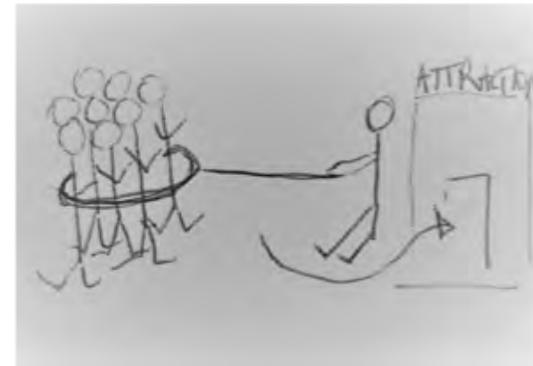


Illustration type 1: literal compositionality

shut out – ‘refuse to allow a person to share your thoughts or feelings’

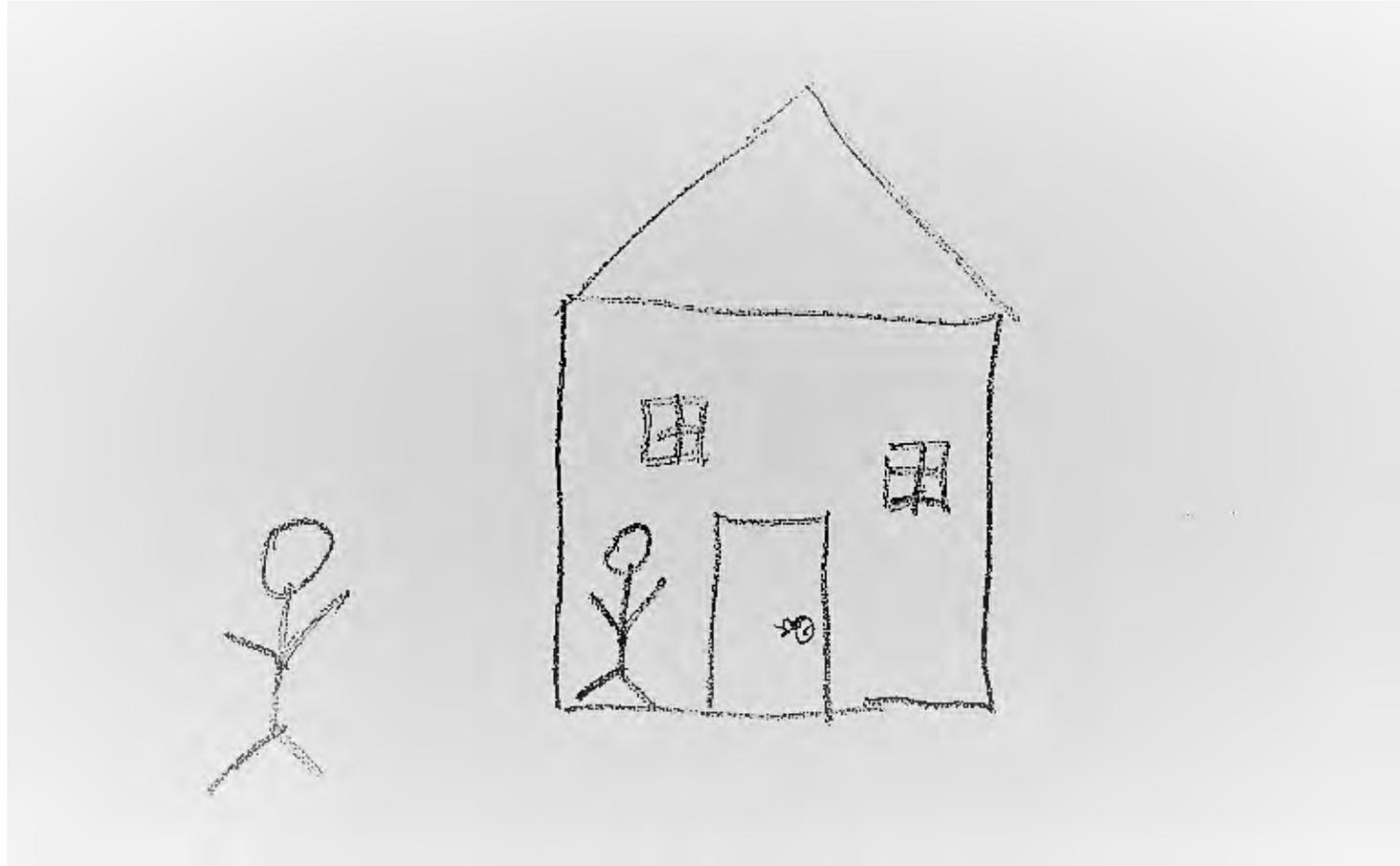


Illustration type 2: visual paraphrase

break out - 'become covered in something like sweat or rash'



Illustration type 3: partial conceptual integration

write down - 'reduce the value of what a company owns'

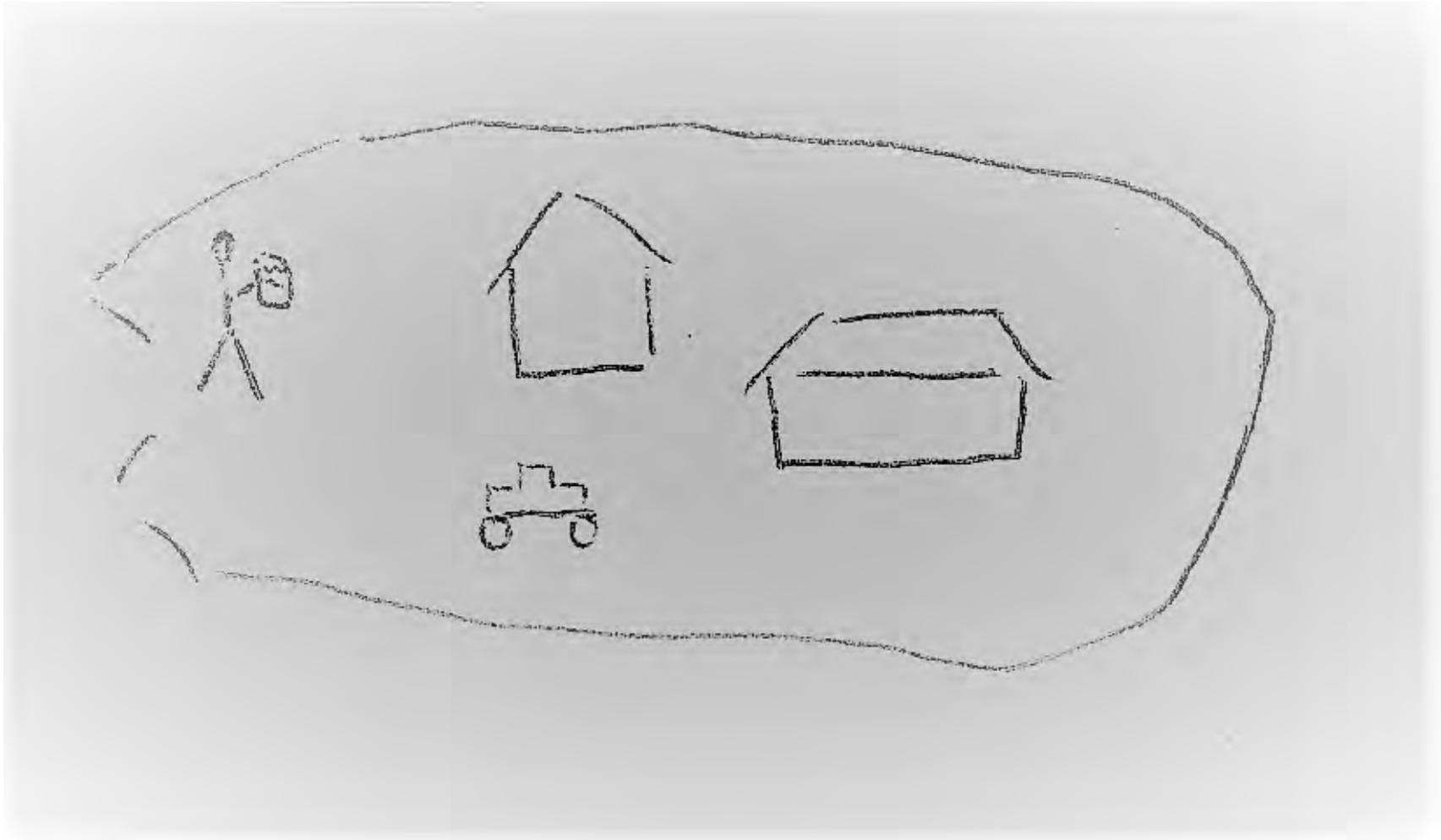
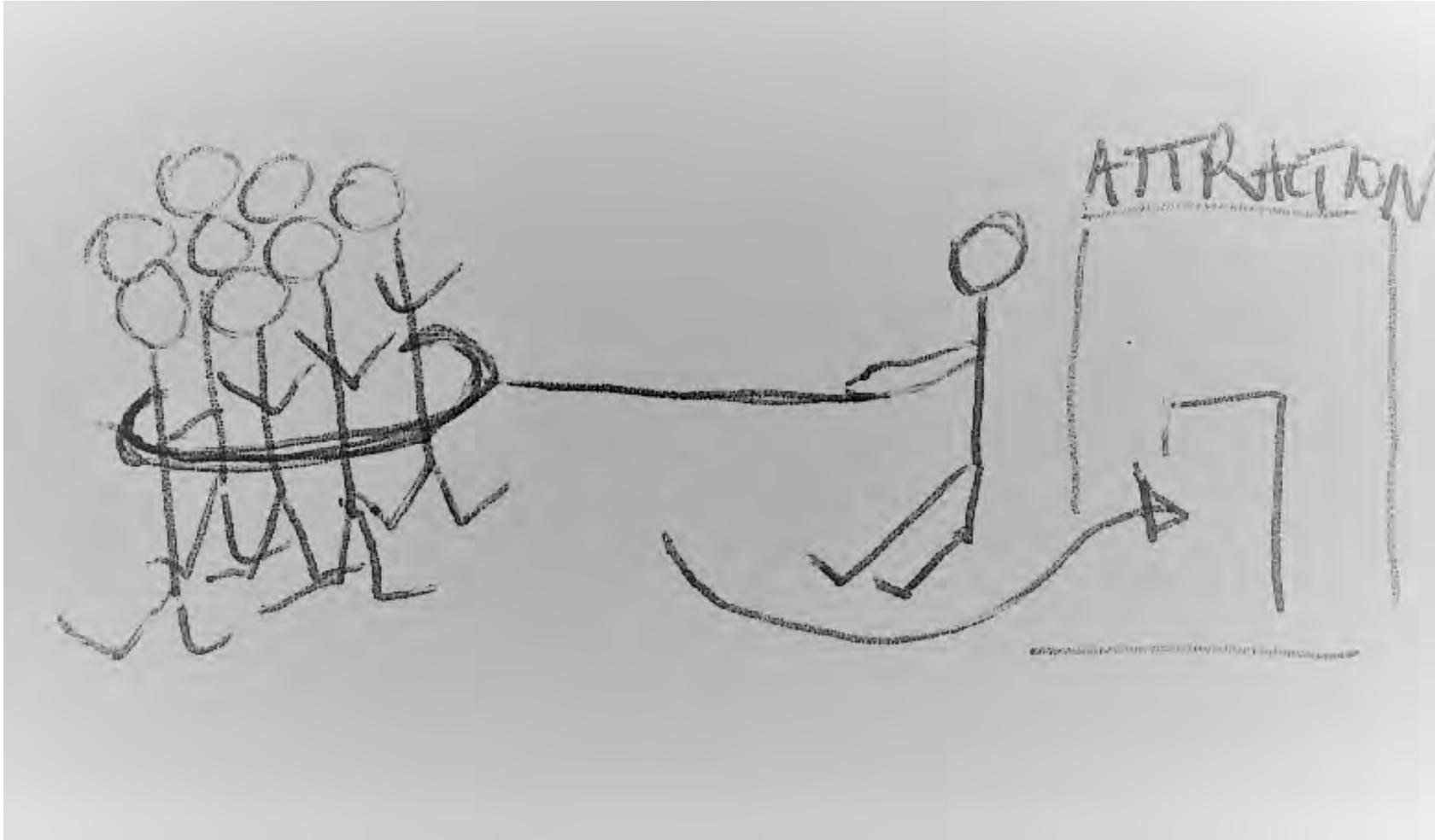


Illustration type 4: full conceptual integration
pull in - 'attract people in large numbers'



Frequency of the four types of illustrations – preliminary tendencies

- More than 50% of the drawings include either **partial or full conceptual integration** – the figurative meanings of the PV constructions are combined with at least one component – either lexical or topological.
- In around 25% of the cases, the participants drew the so called **visual paraphrase**, that is the meaning of the PV is represented without the elements pointing to individual components and their cognitive motivation.
- In around 10% of the cases, the participants simply did not draw anything, and in around 5% of the cases they drew **the literal compositionality**.

Tendencies in relation to the nature of the components (i.e. the content/nature of input spaces)

- Following the methodology used in previous studies on strategic construal of PVs, we looked at tendencies in relation to the nature of the PV components.

(Geld 2009, Geld 2011, Geld and Letica Krevelj 2011, Geld and Maldonado 2011, Geld 2014, Geld and Stanojević 2016)

Differences in illustrations depending on the nature of the verb:
semantically light vs. heavy (e.g. *put, take, go* vs. *write, pull, shut*)

Tendencies in relation to the nature of the components

- **visual paraphrase** and **literal compositionality** are the most frequent visual representations with PVs with semantically heavy lexical components, as in:



- speakers tend to „hold on” to a concrete element that is relatively easy to draw/represent...either the image evoked by the whole figurative phrase or the literal lexical component

Tendencies in relation to the nature of the components

- partial or full conceptual integration is more frequent with PVs with light/schematic lexical component, as in:

go down – ‘be swallowed’

- difficult to say if we have only *down* or both *go* and *down*, but we have the image of the PV’s figurative meaning



Tendencies in relation to the nature of the components

- Preliminary conclusion:

a) in case of schematic/light lexical components (*take, put, go...*) it seems that speakers notice „the conceptual gap” between the PV construction and its meaning...and this gap than serves as a strategic trigger to focus on one salient element in the construction (usually the topological element) and integrate this element with the representation of the PV’s figurative meanings;

b) In case of heavy lexical components (*pull, write, shut...*), they do not seem to experience the „conceptual gap”, so they do not integrate the literal meaning PV components with the figurative meaning of the whole phrase.

Some more examples....

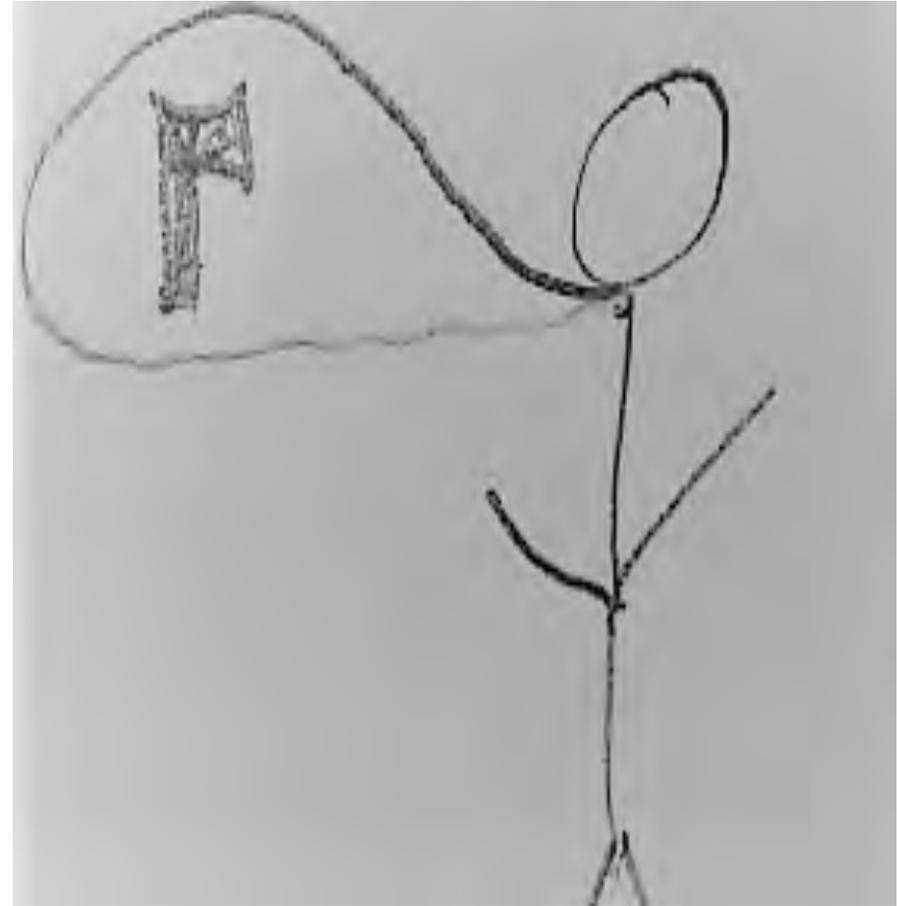
Partial or full integration

cut down – ‘kill someone’



Partial or full integration

cut down – ‘say something
to make somebody feel stupid,
to belittle’



The issue of textual support adjunct to the illustration

- (Barthes 1964, Forceville, 1996)

Barthes – function of the text in relation to the image (anchorage and relay, p. 38)

Anchorage: text navigates the reader towards the desired interpretation of the image. The image is actually more informative, the text simply points to the intended interpretation (p. 40).

Anchorage is actually a widely present phenomenon, e.g. paintings obtain particular interpretation due to the title, the title disambiguates the picture (Bantiniki 2008).

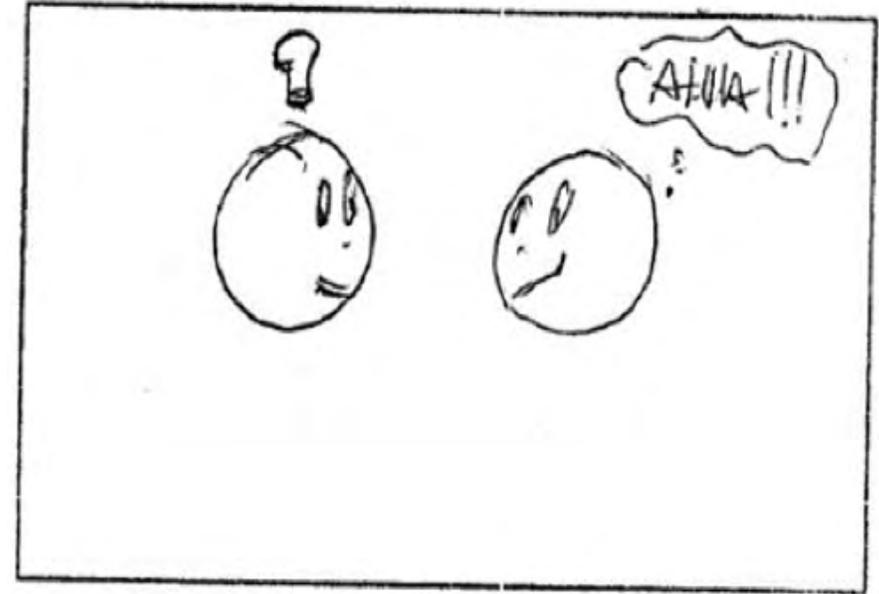
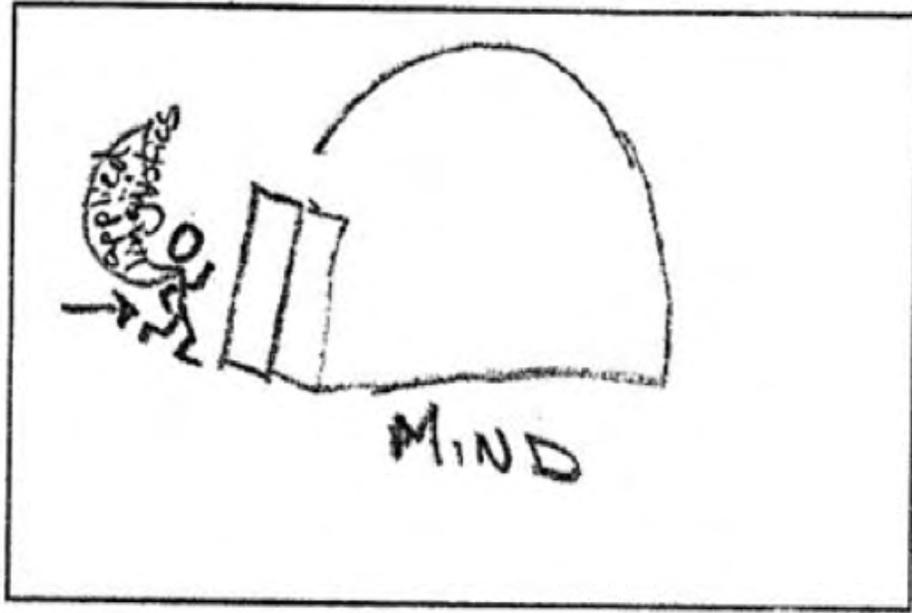
The issue of textual support adjunct to the illustration

Relay: the situation in which the text is seen as more informative, but supported by the image. Both image are perceived as independent and necessary parts of the story (as in comic strips and films) (Barthes, p. 41).

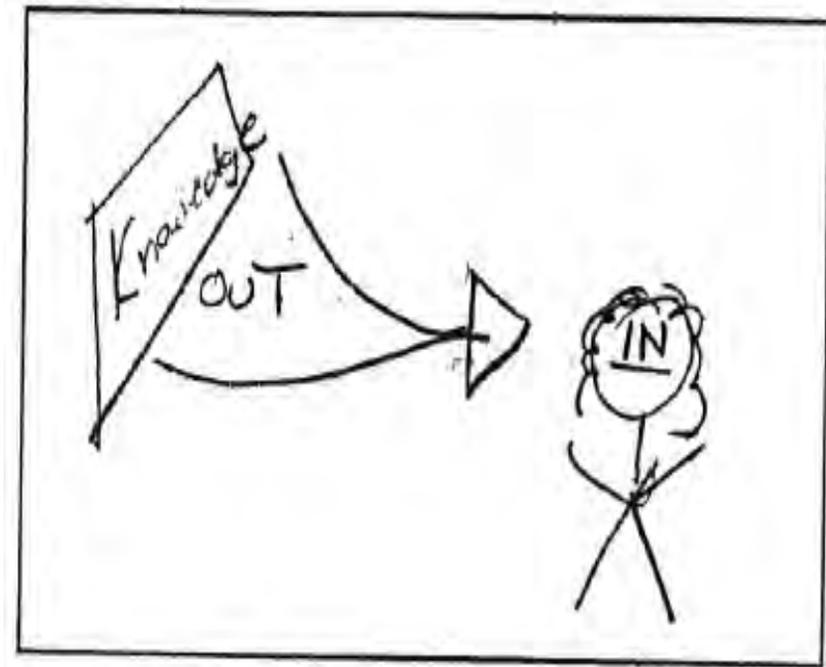
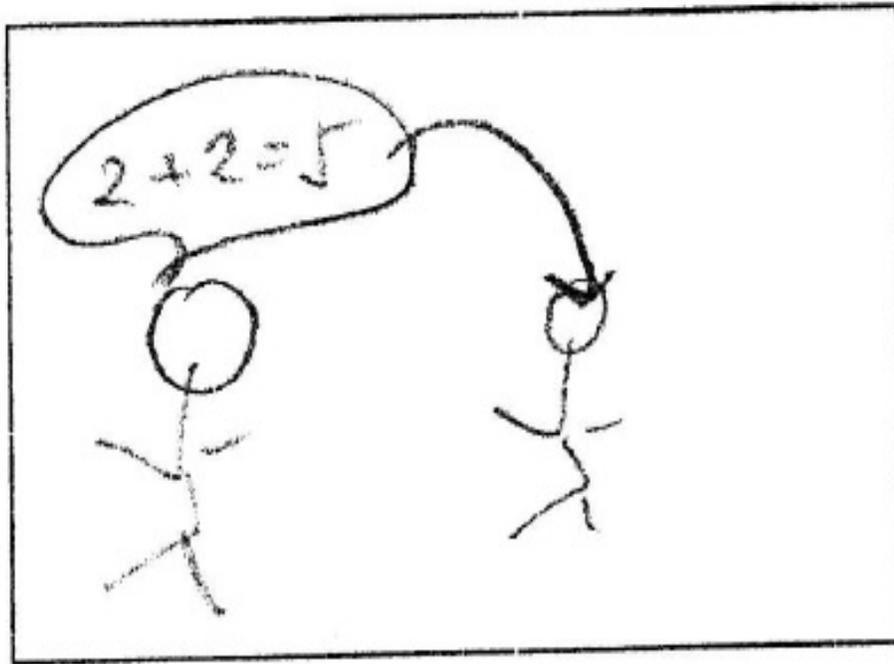
Forceville (1996) modifies Barthes's classification a bit, and basically suggests that anchorage and relay may coexist.

But, our drawings...are of different nature, purpose, etc.

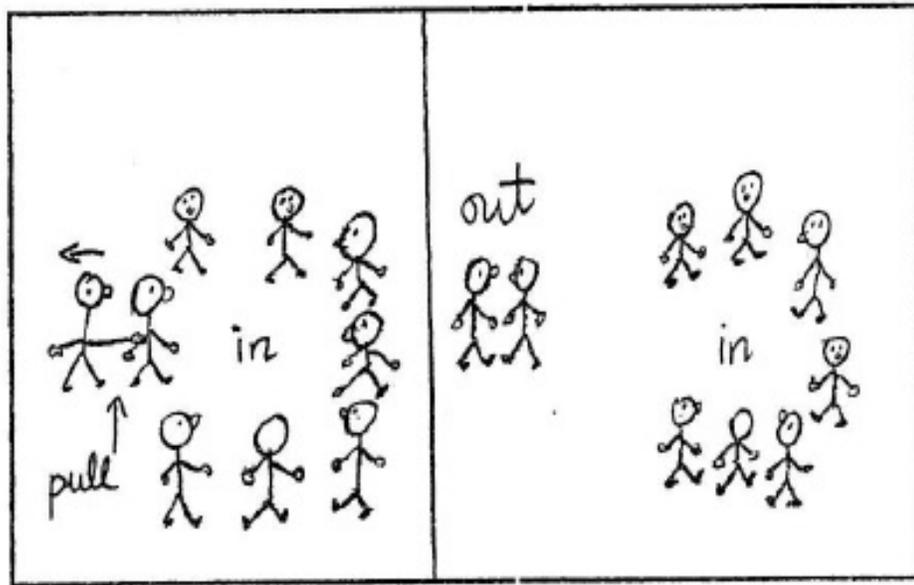
go in – ‘be understood’



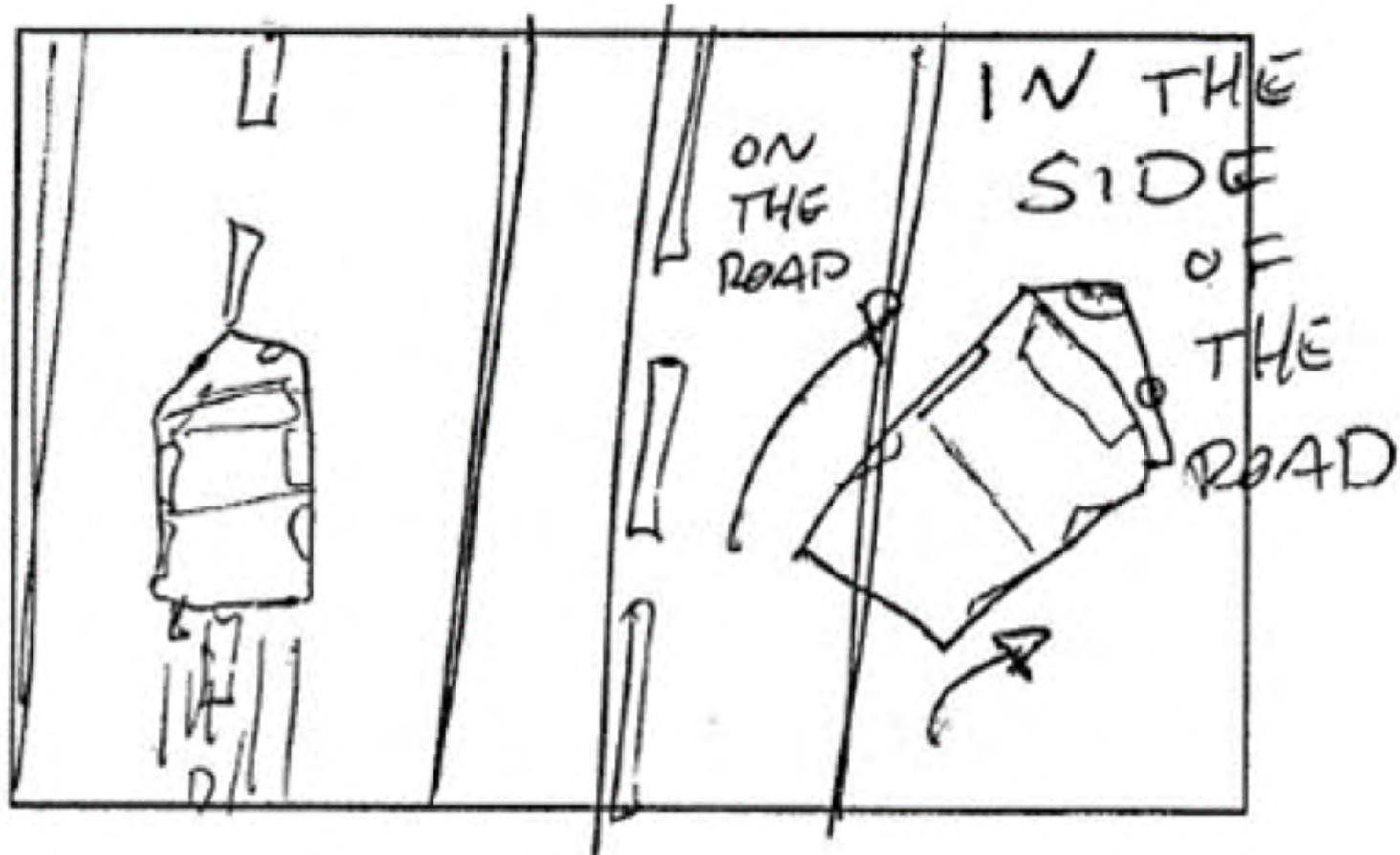
go in - 'understand and absorb something'



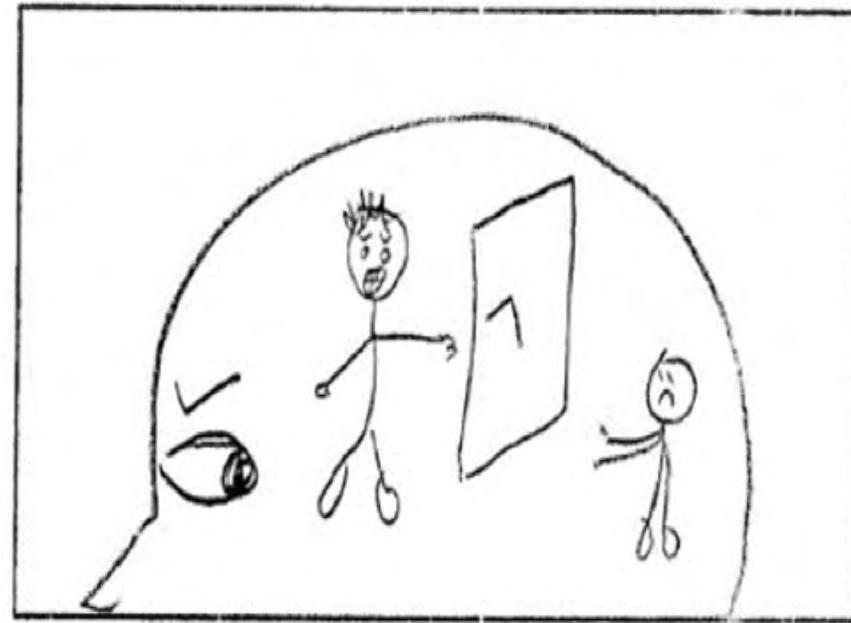
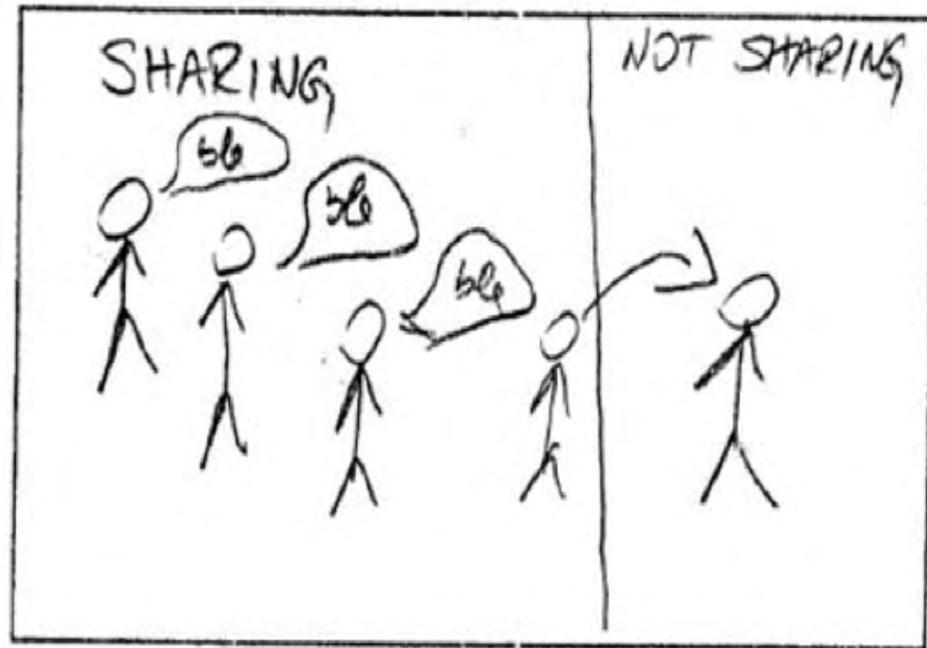
pull out – ‘stop being involved in something’



pull in – ‘move to the side of the road to stop’



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



Instead of conclusion....

- Comments...?
- Questions....?

And thank you...

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