

Evidence for non-existential readings of locative indefinites

Robert Grimm, Choonkyu Lee,
Eva Poortman, and Yoad Winter

Utrecht University
Utrecht Institute of Linguistics OTS

“We are far from a gas station.”

(Iatridou, 2003; 2007)



1. non-existential readings of locative indefinites
2. two possible mechanisms
3. experiment
4. results
5. implications

“We are far from a gas station.”

(Iatridou, 2003; 2007)

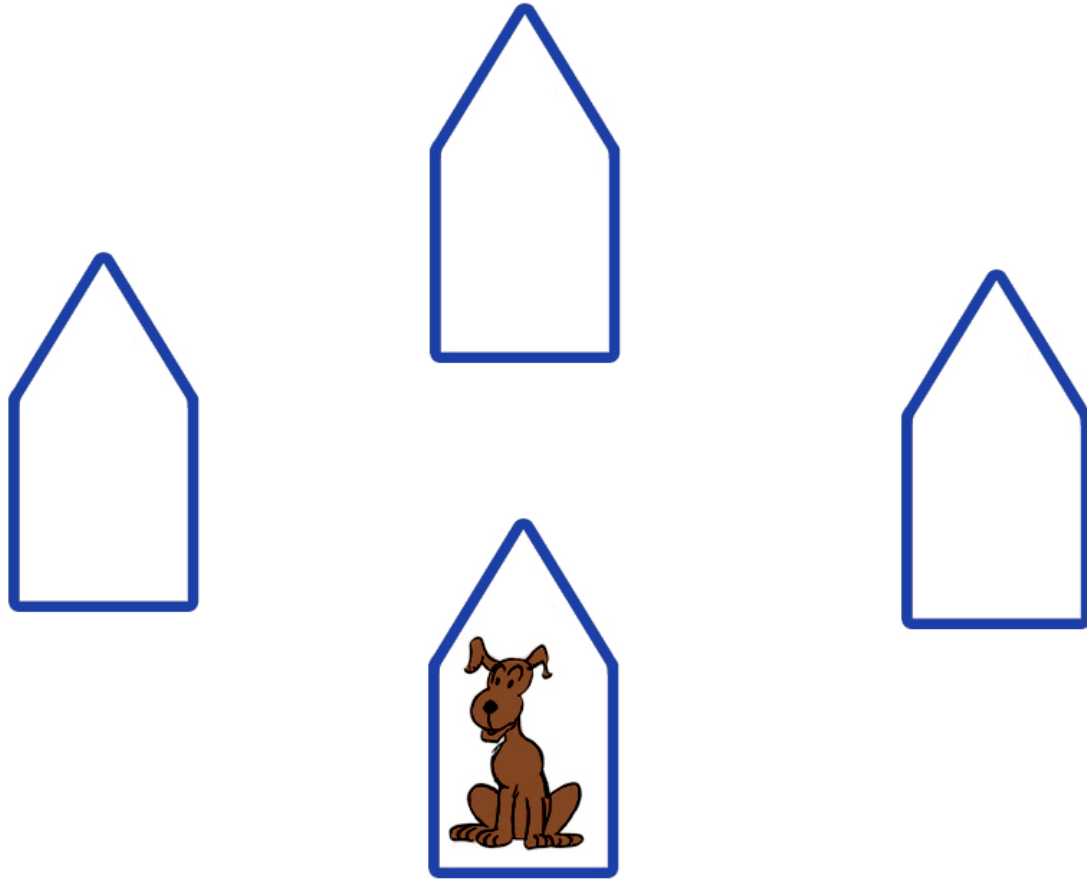


“We are close to a gas station.”

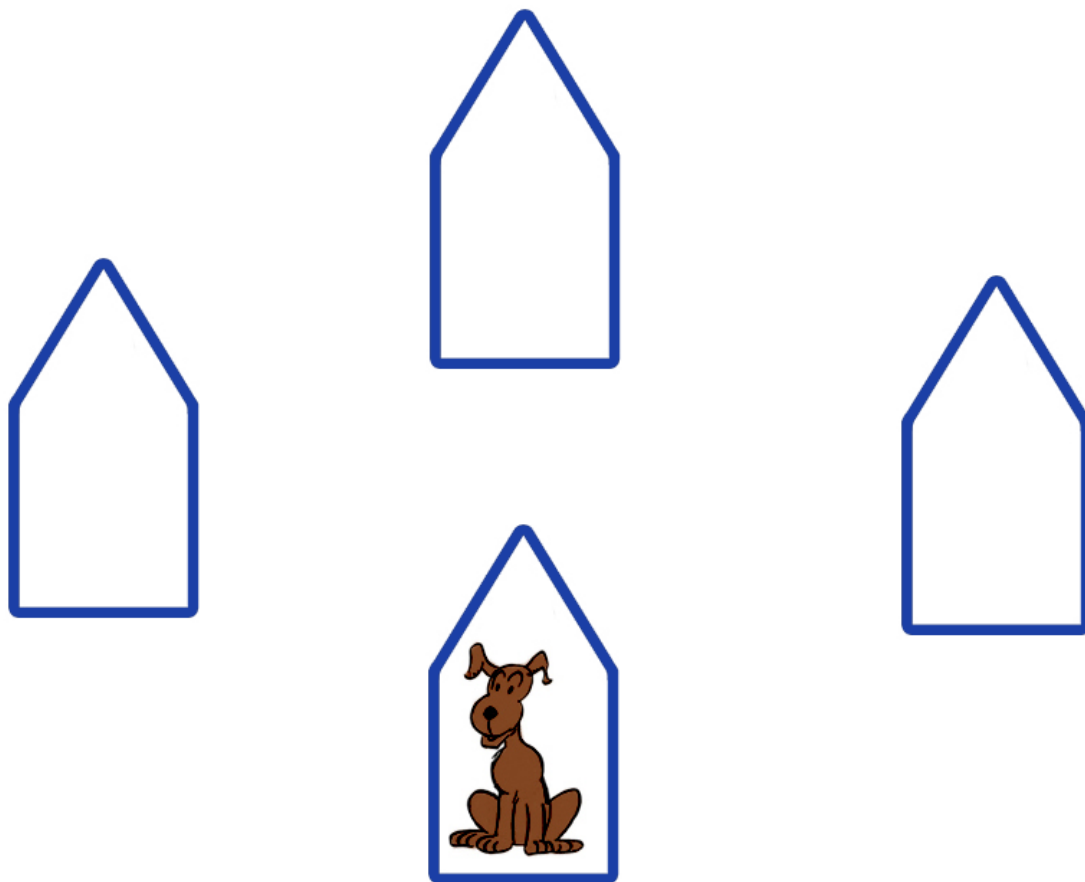
(Iatridou, 2003; 2007)



“Fido is outside of a dog house.”



“Fido is inside of a dog house.”



Implicit Negation

VS

Property Eigenspace Hypothesis

Implicit Negation

PPs decompose into their negated antonyms.

(Büring, 2007)

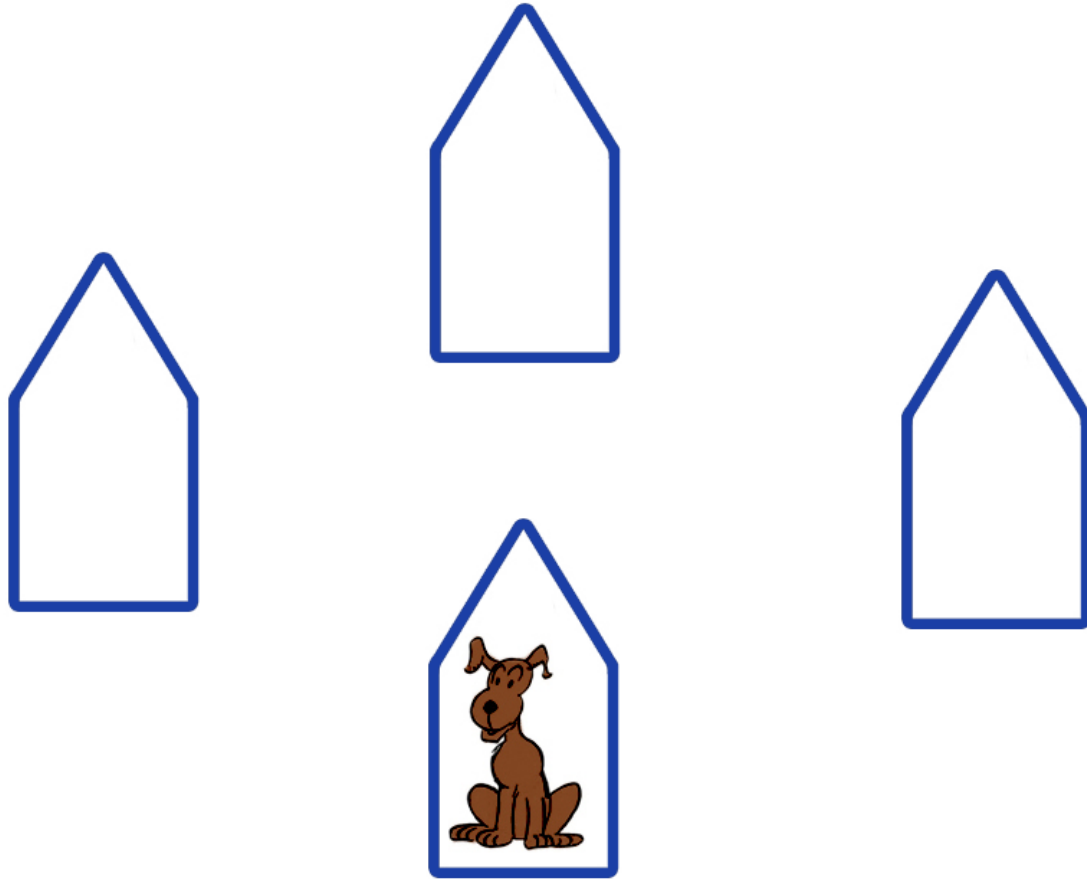
“We are far from a gas station.”



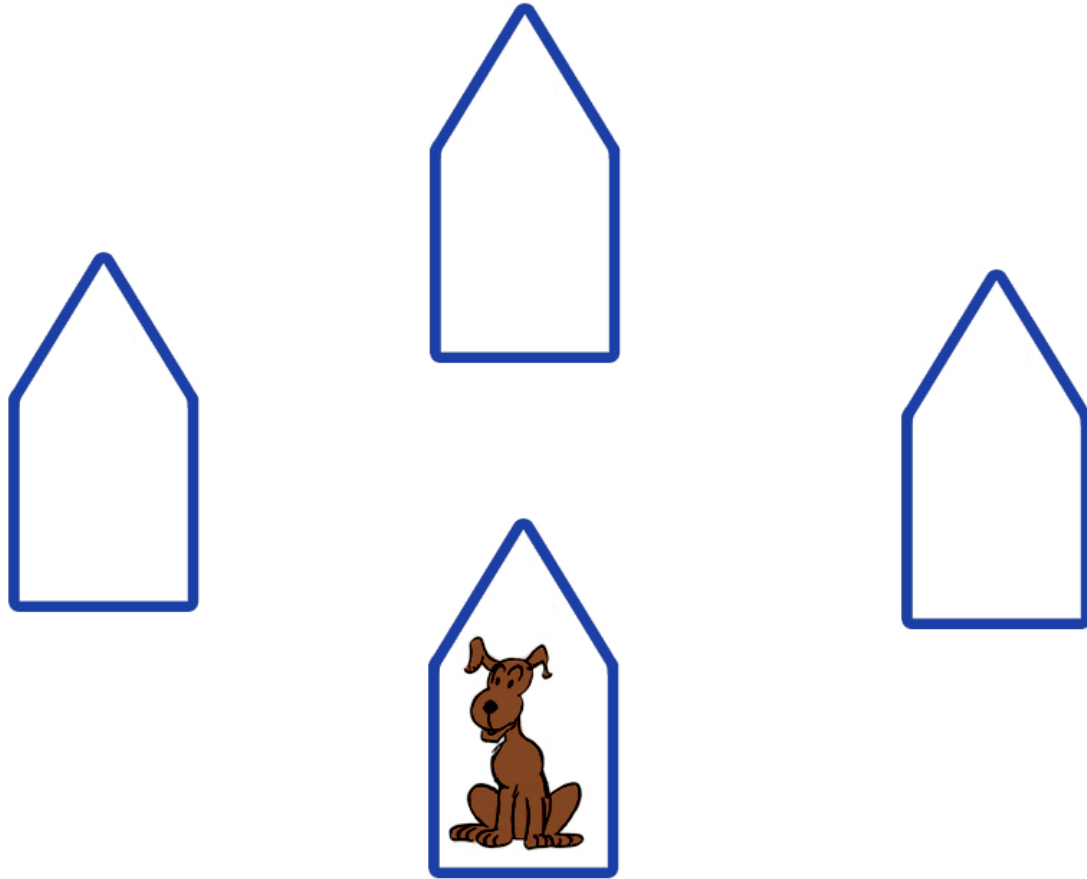
“We are not close to a gas station.”



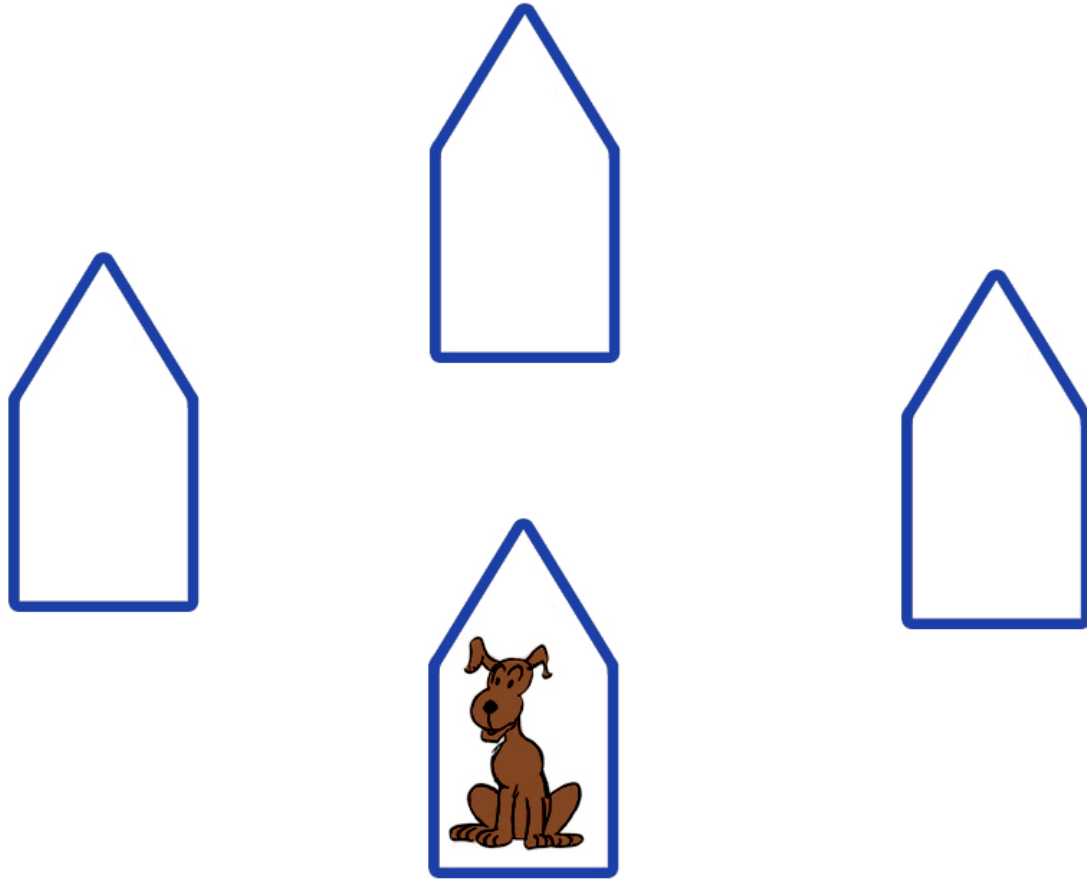
“Fido is outside of a dog house.”



“Fido is not inside of a dog house.”



“Fido is five meters outside of a dog house.”



“We are south of a forest.”



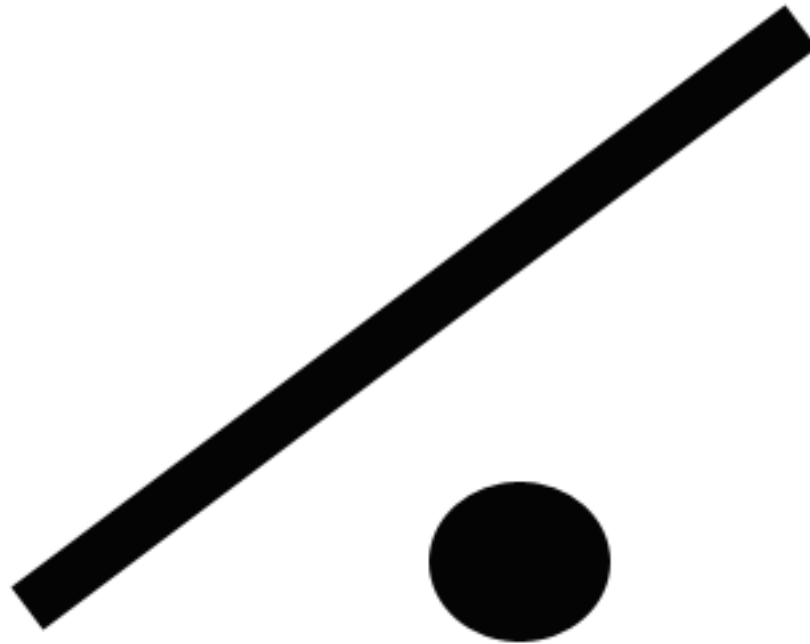
“We are not north of a forest.”



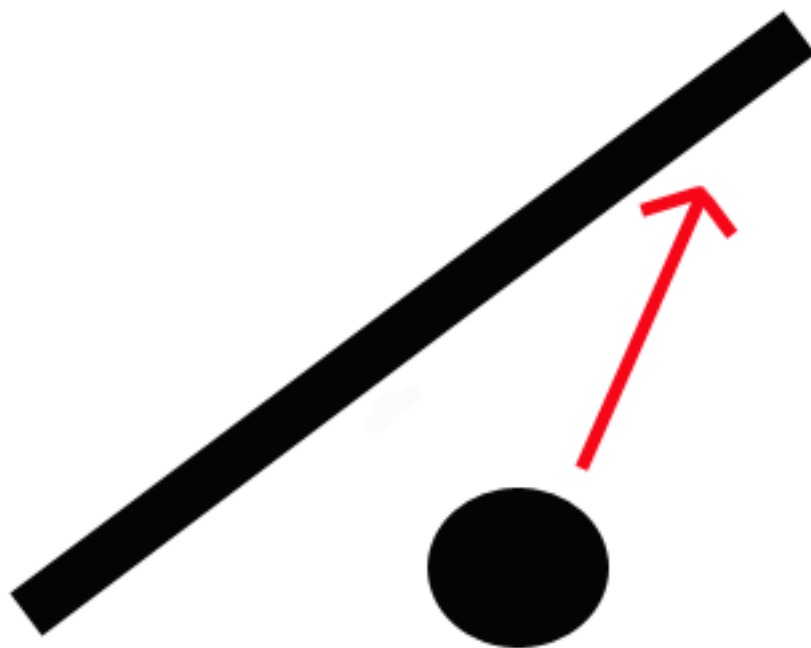
“We are south of a forest.”



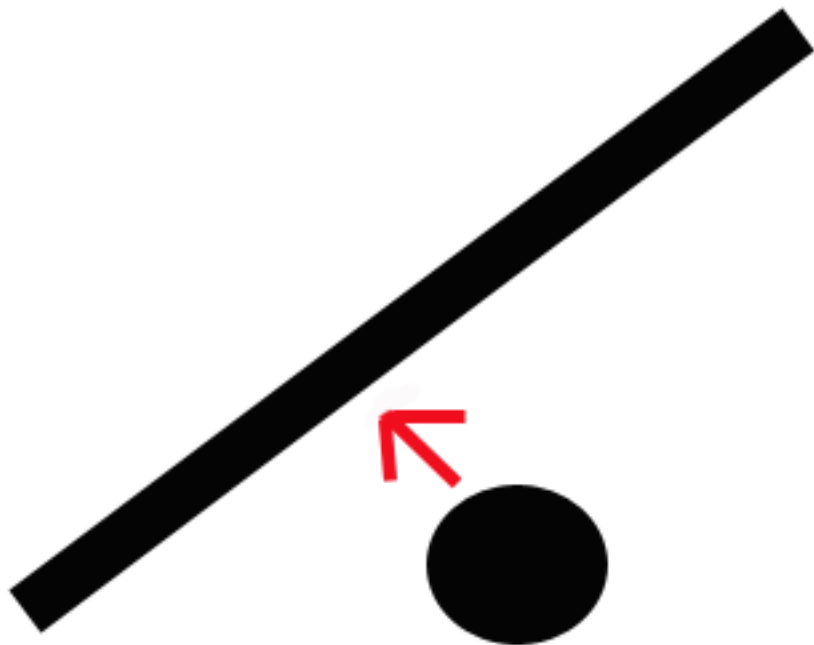
“The dot is right of the line.”
(Zwarts and Winter, 2000)



“The dot is right of the line.”



“The dot is right of the line.”



Property Eigenspace Hypothesis

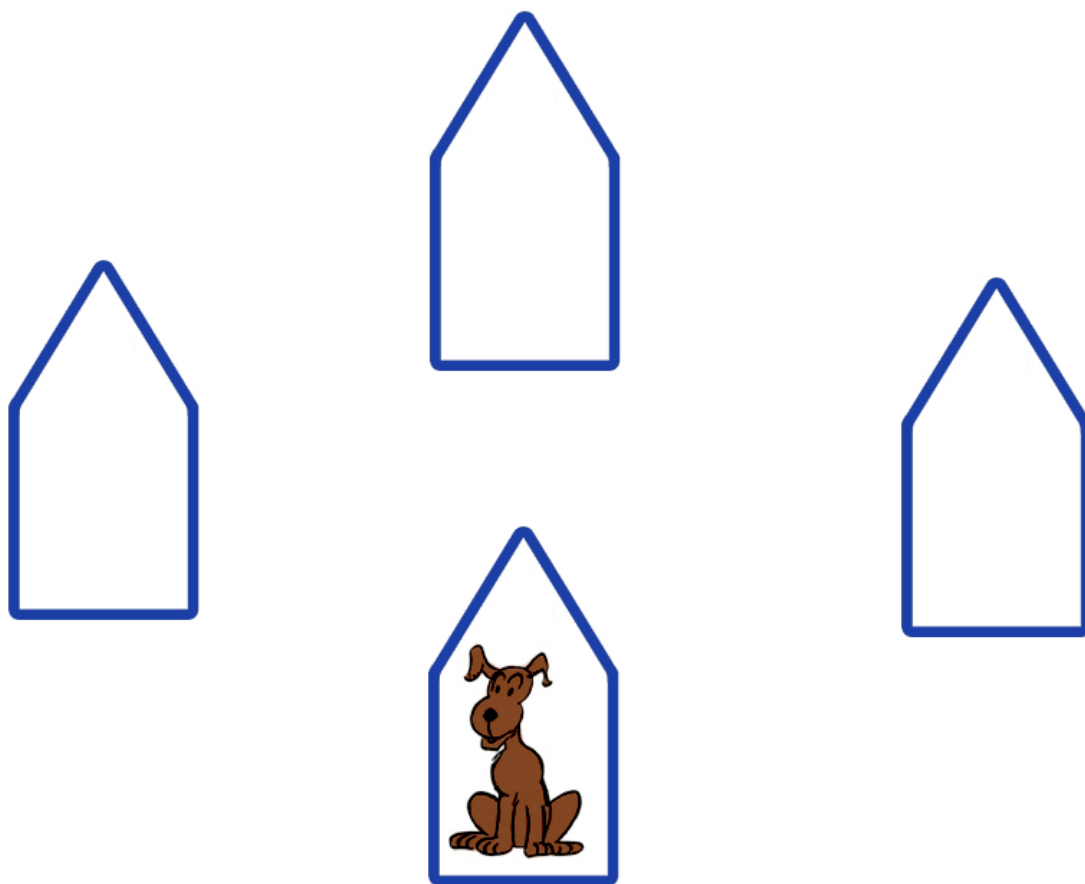
Indefinites denote properties, which are associated with eigenspaces.

(Mador Haim & Winter 2007; unpublished manuscript, 2014)

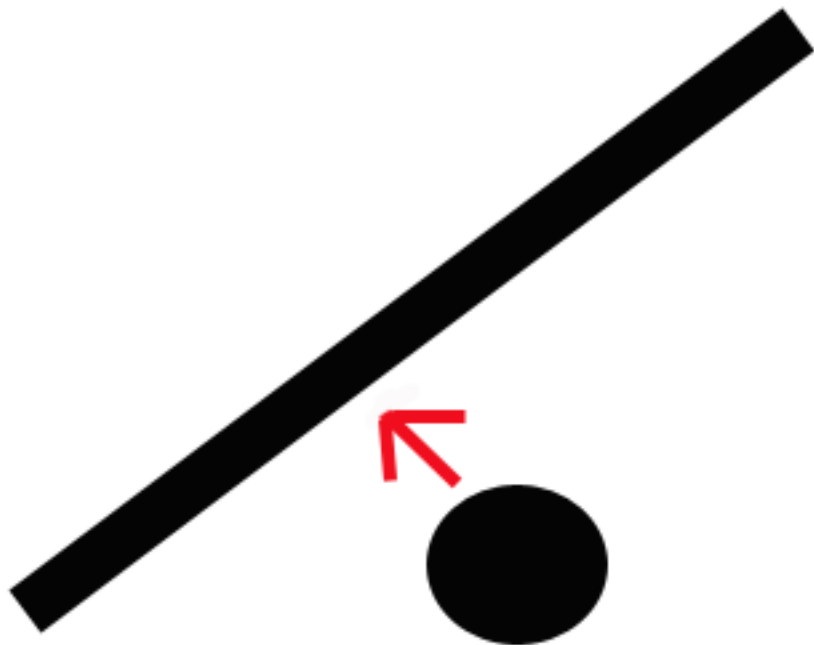
“We are far from a gas station.”



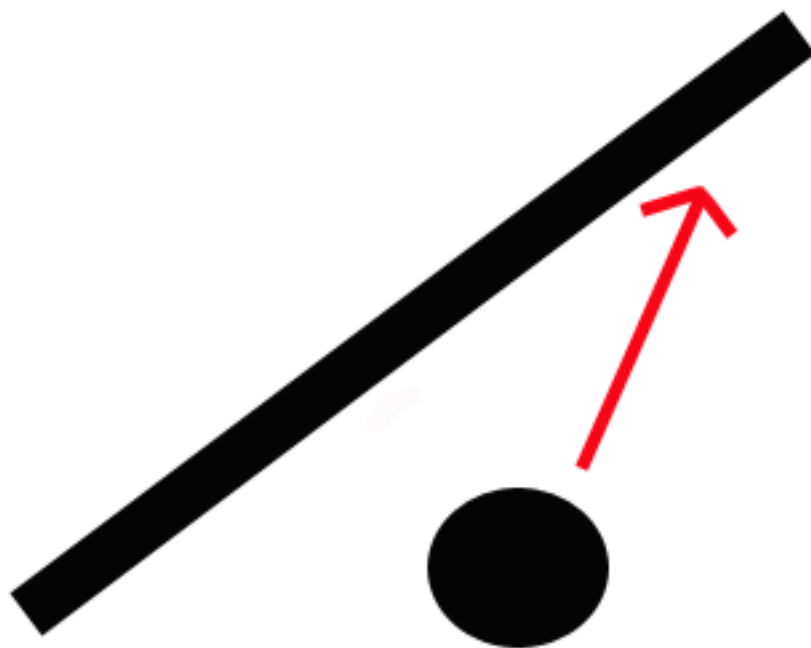
“Fido is outside of a dog house.”



“The dot is right of the line.”



“The dot is right of the line.”



“We are south of a forest.”



Experiment

- **Method:** acceptability judgment task on picture-sentence pairs (block 1) and judgments made a by a referee (block 2)
- **tested:** far from, outside of, south of, left of, north of, east of
- 18 target stimuli in total
- 21 Dutch-speaking subjects, aged 22 – 30 (mean age: 22.5)

We are on a road trip, and we are running low on gas. I check my smartphone to see if there is a gas station nearby. Our position is marked by the cross, and my smartphone displays cheaper gas stations using larger icons.

Is the following sentence acceptable or unacceptable?

“We are far from a gas station.”



“We are far from a gas station.”

acceptable: 1
(EXT)



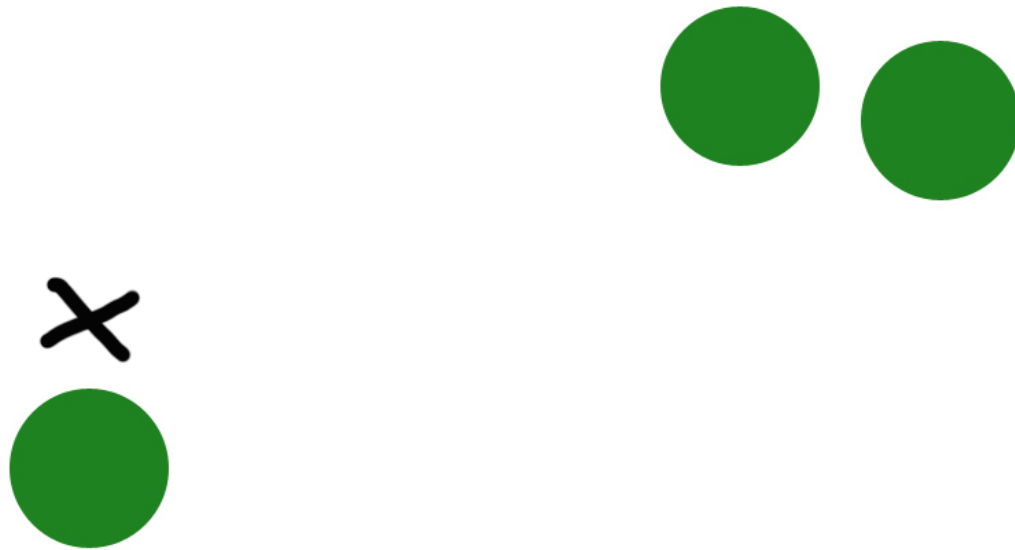
unacceptable: 20
(NON-EXT)



Suppose we are explorers looking for a rare kind of bear. This bear is found in forests. We have been unable to find one, and so I check a map. Our position is marked by the cross, and the green circles are forests.

Is the following sentence acceptable or unacceptable?

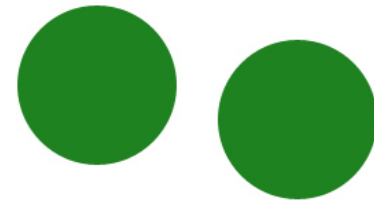
“We are south of a forest.”



“We are south of a forest.”

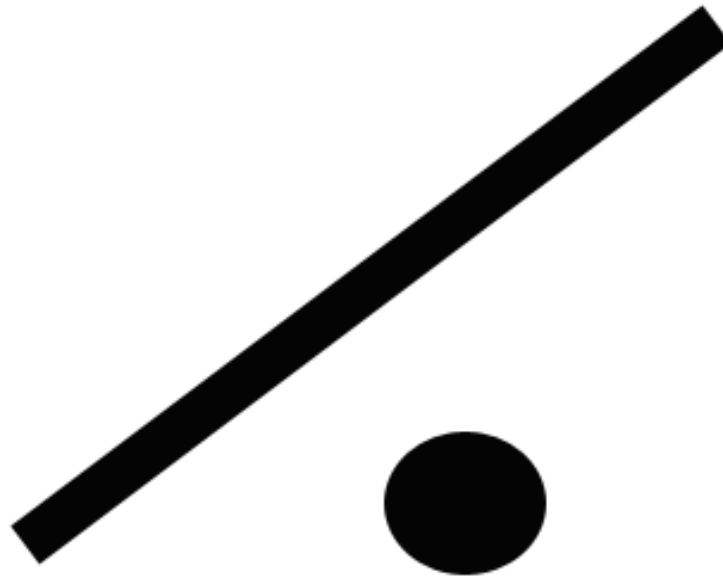
acceptable: 8
(EXT)

unacceptable: 13
(NON-EXT)



Is the following sentence acceptable?

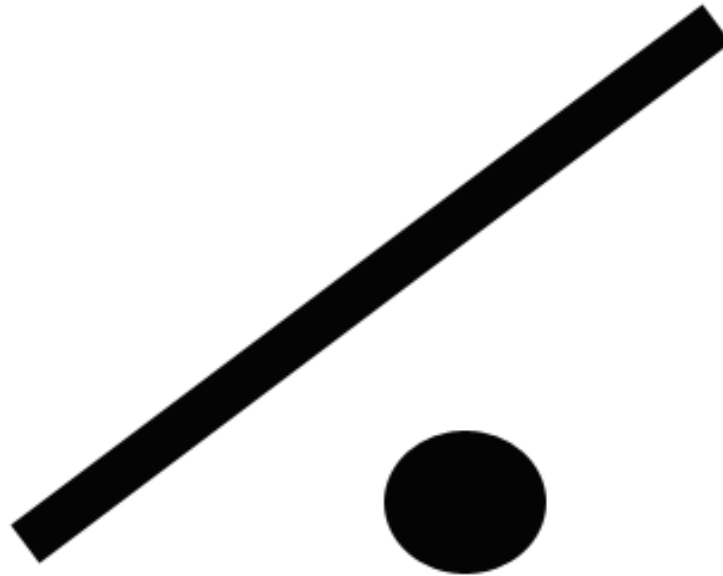
“The dot is left of the line.”



“The dot is left of the line.”

acceptable: 1
(?)

unacceptable: 20
(✓)



A mother tells her children: “When you go out to play, I want you to stay east of a pond!”

The children go out to play. Their position is marked by a cross, and the blue shapes are ponds. Later, the mother says to her children, “You did not do as I asked! You are grounded for the day!”

Is the mother’s statement fair or unfair?



The children are punished because they are not east of a pond.

fair: 8
(NON-EXT)

unfair: 13
(EXT)



A general gives the following order to his soldier: “Stay south of a forest!” The soldier positions himself as shown below. The green circles are forests, and the position of the soldier is marked by the cross.

Later, the general says to his soldier, “You didn’t follow my order. You will be punished accordingly.”

Is the general’s statement fair or unfair?



The soldier is punished because he is not south of a forest.

fair: 3
(?)

unfair: 18
(NON-EXT / EXT)



Answer	all	far from	outs. of	left of	north of	south of	east of
non-ext.	72 %	86 %	93 %	76 %	62 %	62 %	45 %
ext.	28 %	14 %	7 %	24 %	38 %	38 %	55 %

Percentages of responses across target stimuli.

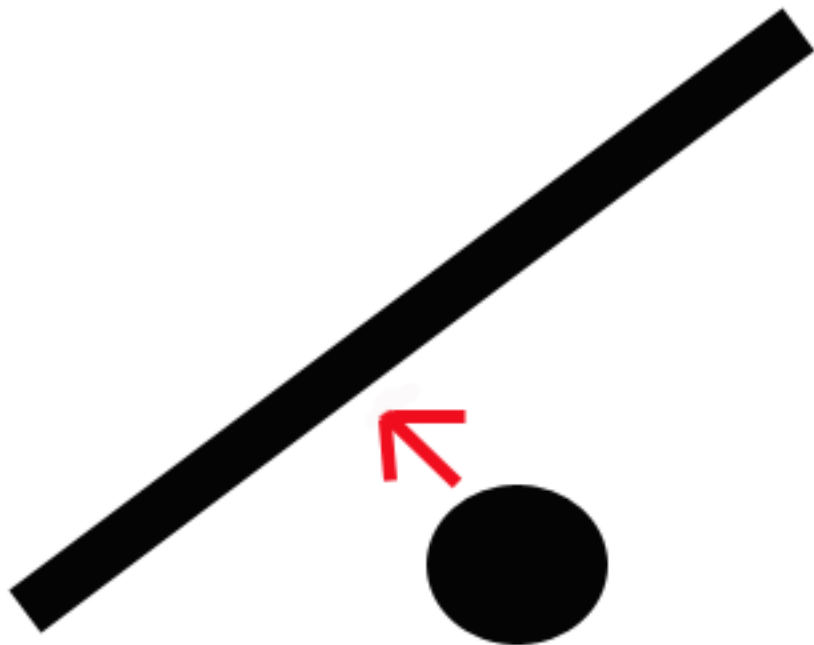
“We are south of a forest.”

False: 3
(?)

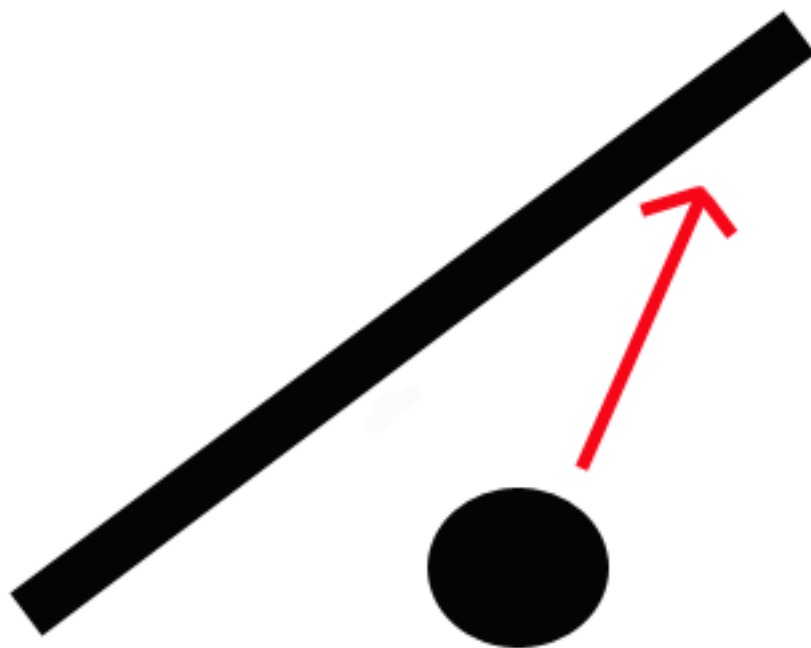
True: 18
(NON-EXT / EXT)



“The dot is right of the line.”



“The dot is right of the line.”



References

- Büiring, D. (2007). Cross-polar nomalies. In *Proceedings of SALT* (Vol. 17, pp. 37-52).
- Iatridou, S. (2003), Two constructions in Greek and what we can learn from them, in 'Proceedings of the 6th International Conference of Greek Linguistics'.
- Iatridou, S. (2007), A free-choice item hidden in verbal morphology. Unpublished manuscript, MIT.
- Mador-Haim, S. and Winter, Y. (2007). *Non-existential indefinites and semantic incorporation of PP complements*. In Masayuki Gibson and Tova Friedman, editors, *Proceedings of Semantics and Linguistic Theory, SALT17*, CLC Publications, Cornell University, Ithaca, NY.
- Mador-Haim, S. and Winter, Y. (2014). Far from Obvious: the semantics of locative indefinites. Unpublished manuscript.
- Zwarts, J. & Winter, Y. (2000), 'Vector space semantics: a model-theoretic analysis of locative prepositions', *Journal of Logic, Language and Information* 9, 169–211.