

# Language and Cognition – lecture 4

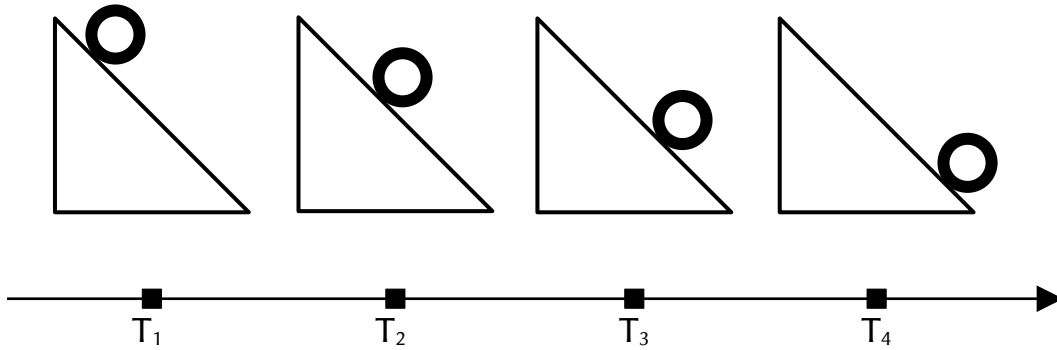
## Scanning

# How to scan 77081385556?

- 77081385556 } summary scanning
- $7 \rightarrow 7 \rightarrow 0 \rightarrow 8 \rightarrow 1 \rightarrow 3 \rightarrow 8 \rightarrow 5 \rightarrow 5 \rightarrow 5 \rightarrow 6$  } sequential scanning
- $77 \rightarrow 08 \rightarrow 13 \rightarrow 85 \rightarrow 55 \rightarrow 6$
- $77 \rightarrow 08 \rightarrow 13 \rightarrow 8 \rightarrow 555 \rightarrow 6$
- $77 \rightarrow 08 \rightarrow 1385556$
- $7708138555 \leftarrow 6$
- $??7 \leftarrow 7 \leftarrow 0 \leftarrow 8 \leftarrow 1 \leftarrow 3 \leftarrow 8 \leftarrow 5 \leftarrow 5 \leftarrow 5 \leftarrow 6$

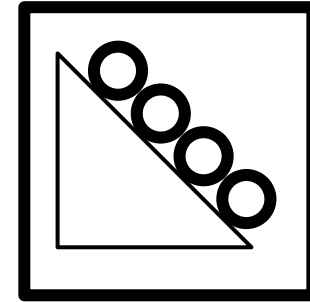
# Nouns vs. verbs

Sequential scanning



*It rolls down.*

Summary scanning

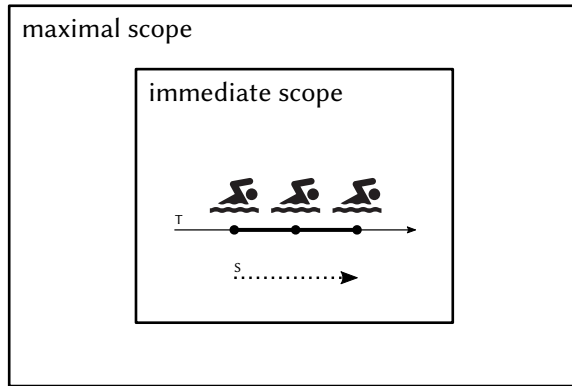


*rolling down*

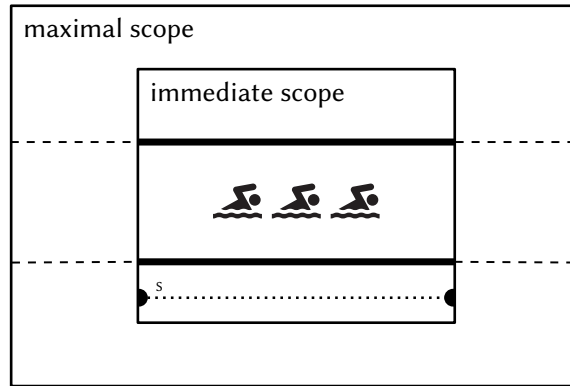
# Subclasses of nouns and verbs

- When boundaries of a thing (mass nouns) or a process (imperfective verbs) are outside the immediate scope, scanning within the immediate scope does not reach boundaries.
- When boundaries of a thing (count nouns) or a process (perfective verbs) are inside the immediate scope, scanning within the immediate scope reaches boundaries.

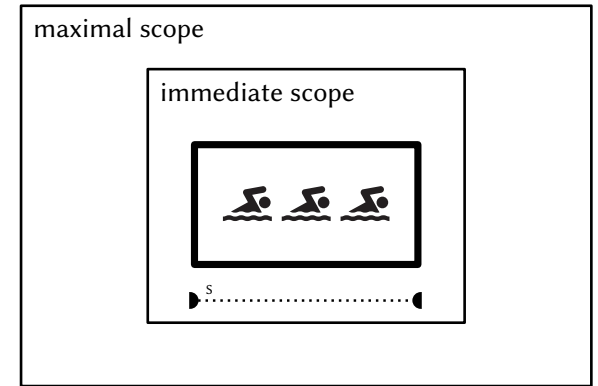
# Verbs and deverbal nouns



(a) *I swim (a lot)* (verb)

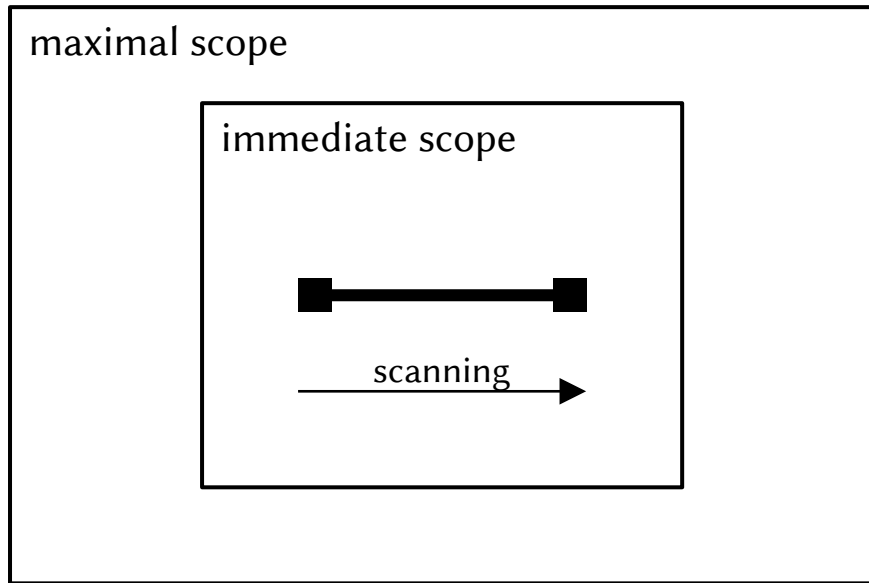


(b) *swimming* (mass noun)

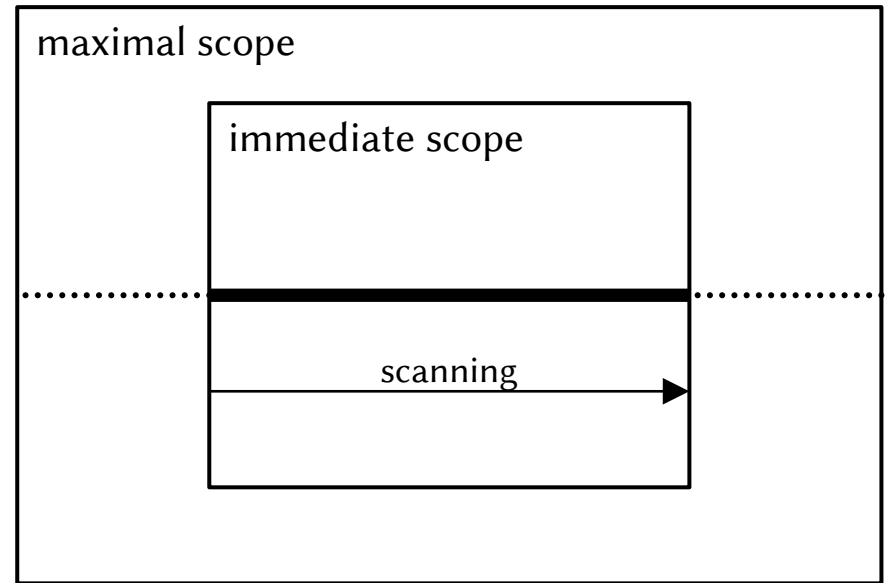


(c) *a swim* (count noun)

# Bounded vs. unbounded construals



bounded construal

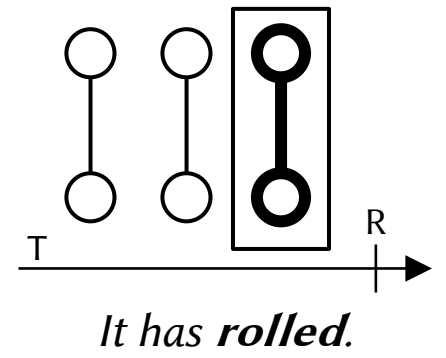
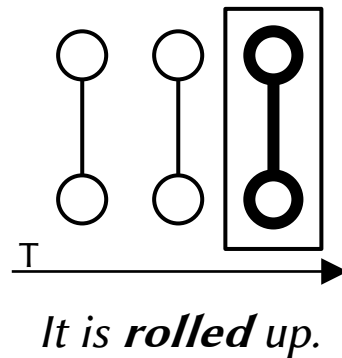
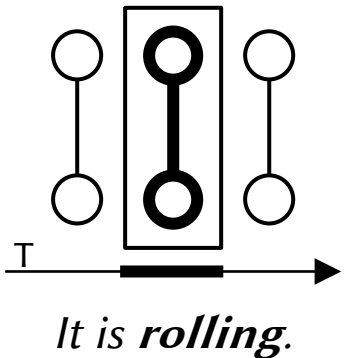
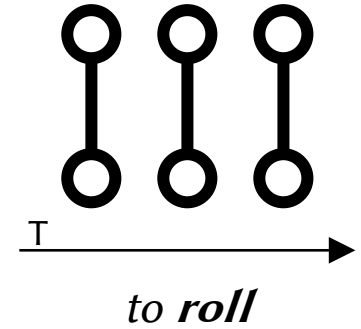
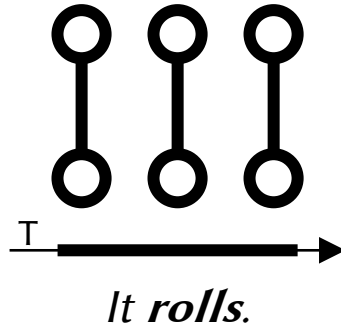
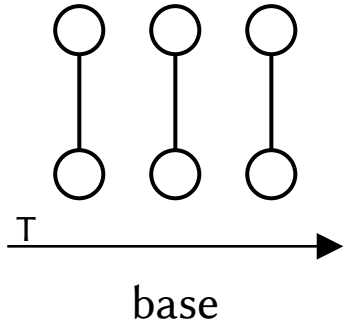


unbounded construal

# Participles and infinitives

- The difference between the construal of participles, infinitives, and finite verbs is the difference in scanning and profiling.
- Finite verbs involve **sequential scanning** over time.
- Infinitives involve **summary scanning** of the entire process.
- Present participles (*-ing*) involve **summary scanning** that does not reach the limits of the process in the immediate scope.
- Past participles (*-ed*) involves **summary scanning of the final stage** of the process.

# Participles and infinitives (cont.)



## Scanning in spatial domains

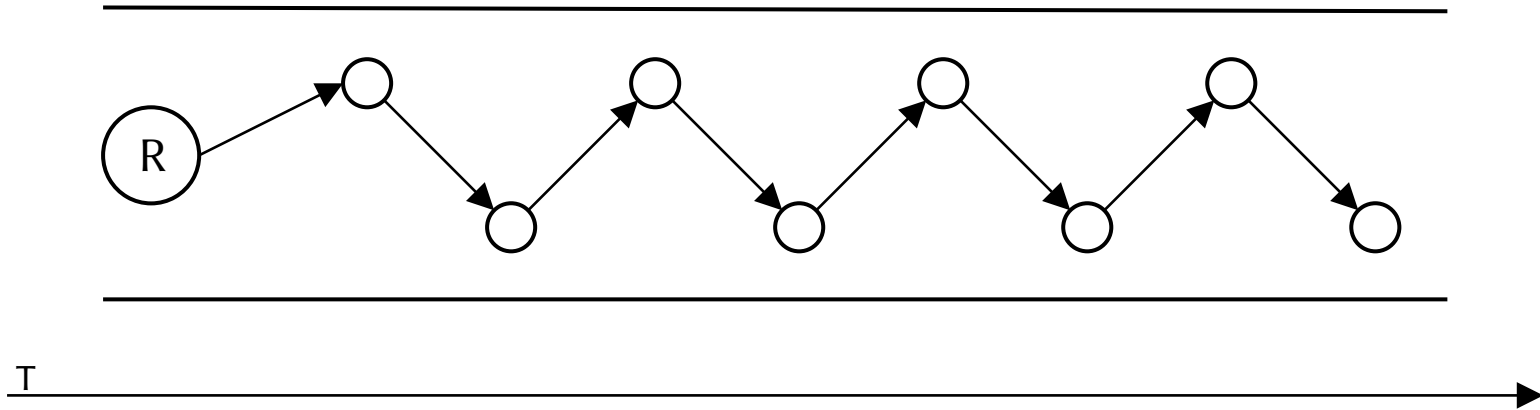
- (1)(a) *The hill gently **rises** from the bank of the river.*
- (b) *The hill gently **falls** to the bank of the river.*
- (2)(a) *An ugly scar extends **from** his wrist **to** his elbow.*
- (b) *An ugly scar extends **from** his elbow **to** his wrist.*
- (c) *?An ugly scar extends **to** his wrist **from** his elbow.*

## Scanning in non-spatial domains

- (3)(a) *Gestation period varies greatly **from one species to the next**.*
- (b) *I'll never get into a size 8, and a size 9 is probably **still** too small.*
- (c) *Don't mention calculus—elementary algebra is **already** too advanced for him.*
- (d) *Our Christmas tree **gets smaller** every year.*

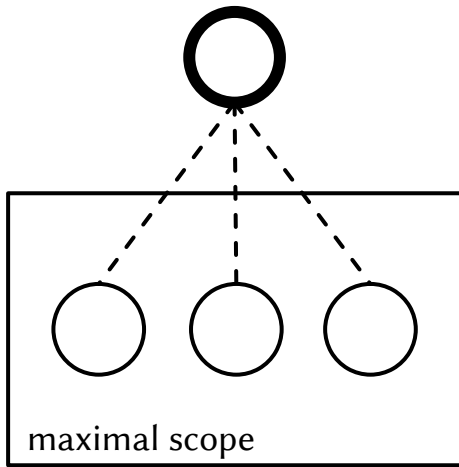
# Scanning and fictive motion

(4) *There's a house **every now and then** through the valley.*

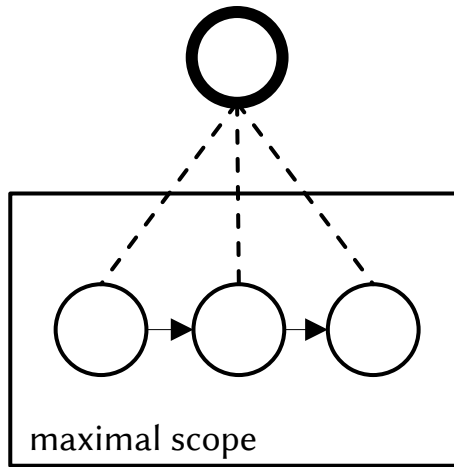


# *every, each, any*

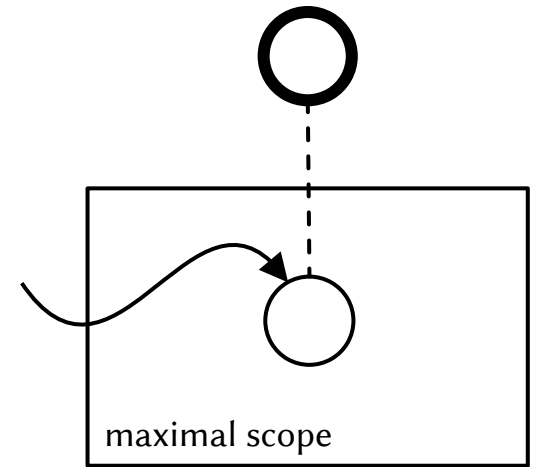
(5) *The air is so clear that you can see {every / each / any} peak in that mountain range.*



*every*



*each*



*any*

## A more complex example...

“Its coinlike scales ranged from gold on its breast to jet upon its back, running from copper through red down the length of its tail and back across the breadth of its great vanes” (Zelazny 1979).

# References

- Langacker, Ronald W. 2013. *Essentials of Cognitive Grammar*. Oxford-New York: Oxford University Press.
  - Sections 3.4.2, 3.5, 4.3.2, 14.2.2
- Langacker, Ronald W. 2008. *Cognitive Grammar. A Basic Introduction*. New York: Oxford University Press.
  - Sections 3.4.2, 3.5, 4.3.2, 14.2.2
- Langacker, Ronald W. 2016. *Nominal Structure in Cognitive Grammar: The Lublin Lectures*. Edited by Adam Głaz, Hubert Kowalewski, and Przemysław Łozowski. Lublin: MCSU Press.
  - Lecture 4, section A
- Zelazny, Roger. 1979. *Roadmarks*. New York: Ballantine Books.