



*"Our reputation for longevity is based on several factors: hard work, simple food, lack of stress, and the inability to count correctly."*

SOAR  
2005



THE  
**Krasnow Institute**  
FOR ADVANCED STUDY  
GEORGE MASON UNIVERSITY

# Counting and SoAR

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# Counting and SoAR

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- Biological Basis of a “number module”
- Counting Processes
- Counting in SoAR
- Programming Demos

# Number Module

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- Functions of a Number Module
  - Perception of quantities
  - Comparisons base on quantity
- Evidence for a Number Module

All societies, all ages, brain localization, fast & automatic, ancestral evidence, relation to mathematics, part of cultural

# Counting Processes

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- Perception of small quantities (~5)
- 1:1 association procedure
- Standards: body parts, tokens,  
words, symbols

# Counting in SoAR

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## Demos for SoAR FAQ:

- Using elaborations
- Using operators
- Using RHS function

# Programming Demos

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- Programming Soar is difficult
- Share the nuggets!
- Next:
  - Saving transitory sensor inputs?
  - Mapping the environment?
  - \_\_\_\_\_?