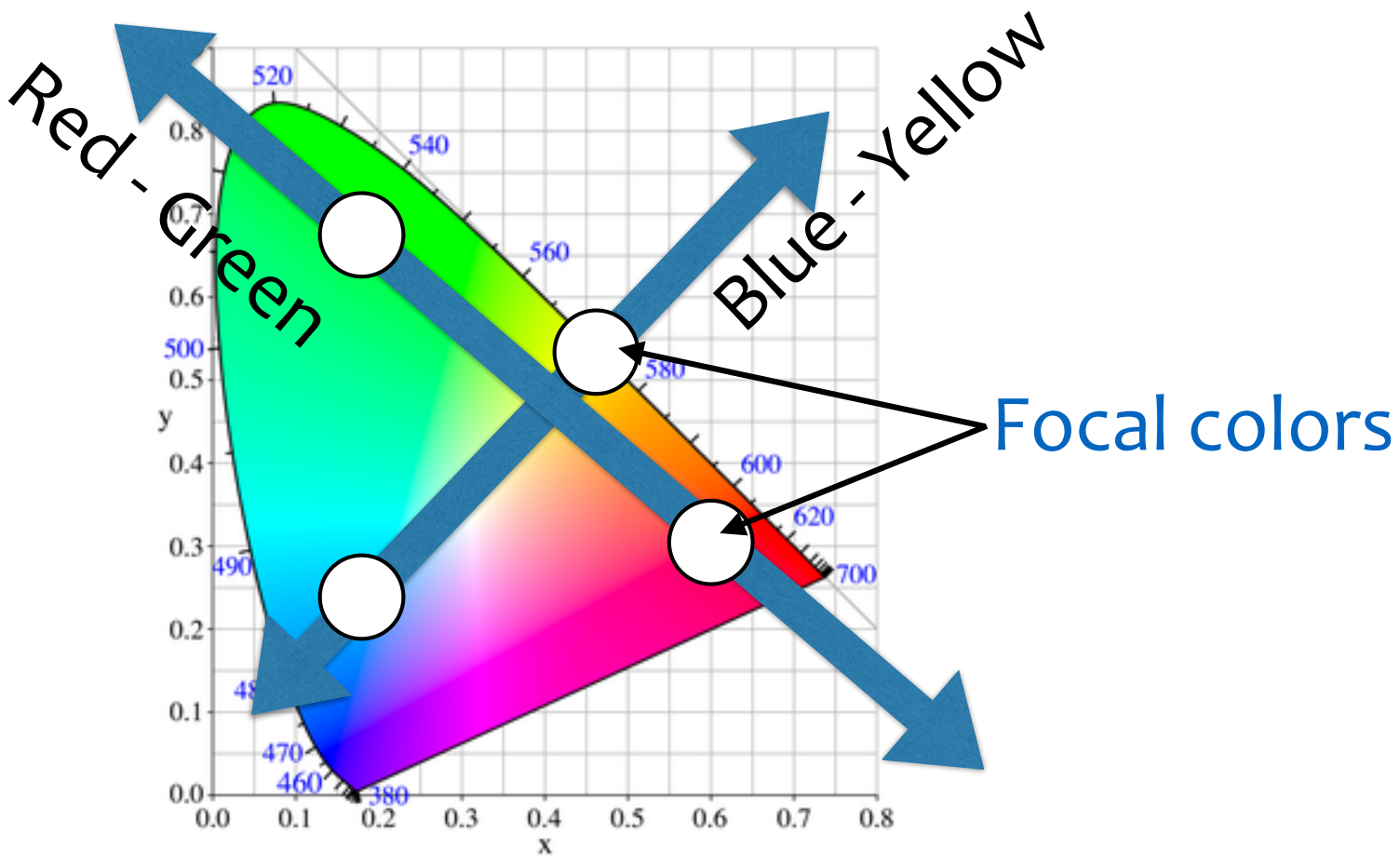
Color

- Human color system

  - Physical color is determined by combinations of pure wavelengths

  - But psychological color has two dimensions, red-green and blue-yellow



- Rosch/Heider (1973):

  - Dani people have 2 color terms (LIGHT and DARK)

  - But were able to identify and learn focal colors similarly to Westerners (= WEIRD: Westernized, educated, industrialized, rich, and democratic)

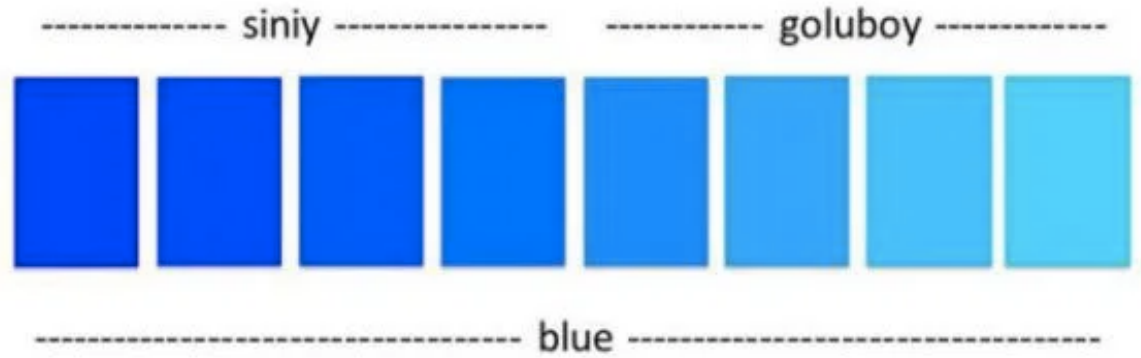
  - Hence: color categories are universal and not influenced by language

- Davidoff et al (1999):

  - Berinmo people have a color boundary that English doesn't have (nol/wor)

  - Berinmo color classification errors tended to respect the nol/wor boundary, while English speakers' errors the English boundary

Russian blues



- Russian has two basic words for "blue": siniy ("dark blue") and goluboy ("light blue")
- Winawer et al. (2007) showed that Russian subjects (but not non-Russians) show faster discrimination across the siniy/goluboy boundary than within each color

The language of thought

- Language of thought (LOT) hypothesis: we "think" in an internal language of concepts, aka mentalese
- Natural (spoken) language expresses ideas that arise in LOT

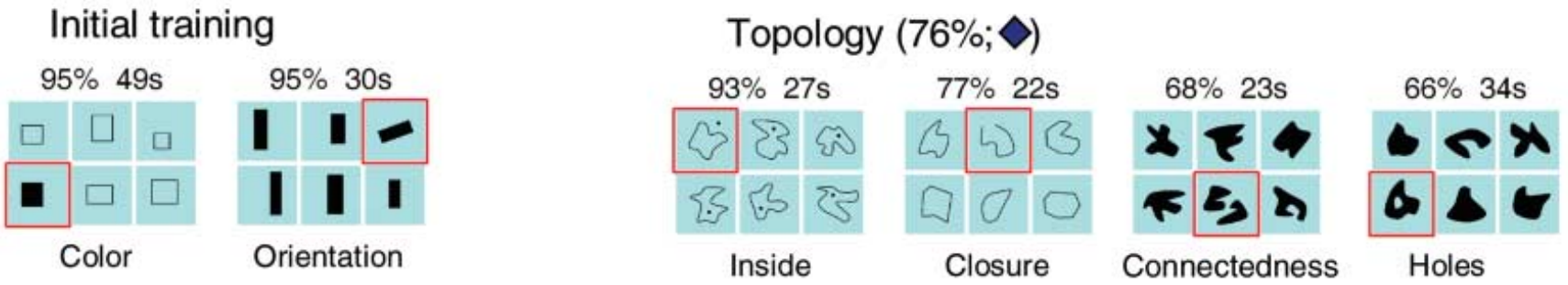
  vs.:

- (Whorf:) Internal conceptual structure reflects language and hence culture

  - people from different cultures think in fundamentally different ways

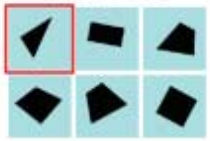
  - Note: this implies that animals don't really "think"

Geometric knowledge in the Mundurukú



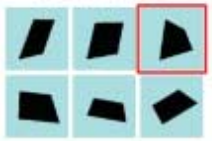
Geometrical figures (79%;△)

77% 24s



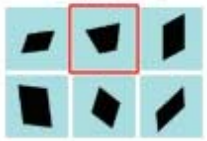
Quadrilateral

66% 25s



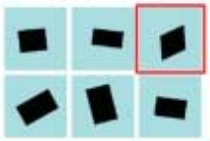
Trapezoid

77% 23s



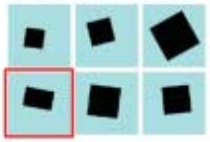
Parallelogram

86% 22s



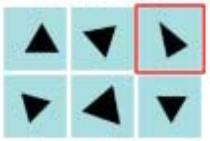
Rectangle

73% 31s



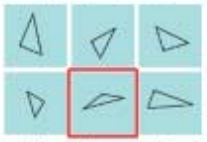
Square

66% 27s



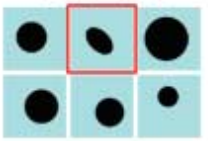
Equilateral triangle

77% 18s



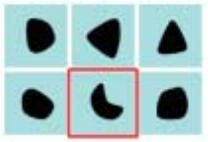
Right-angled triangle

91% 15s



Circle

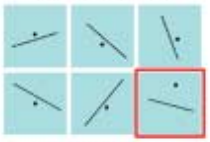
95% 19s



Convex shape

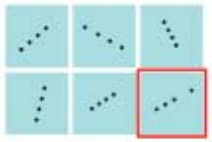
Metric properties (62%;●)

93% 20s



Distance

55% 20s

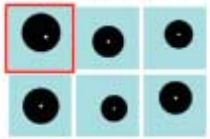


Equidistance

45% 28s

Increasing distance

68% 23s

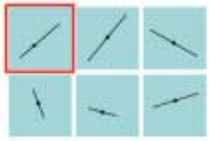


Center of circle

48% 28s

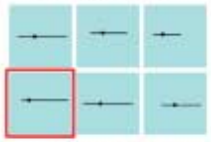
Center of quadrilateral

36% 32s



Middle of segment

86% 22s



Fixed proportion