Spatial semantic typology in computational perspective

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Based on:


[Link to paper]
Bowerman & Pederson, 1992;
Levinson et al., 2003
Claim

This variation reflects **functional pressure** for informative communication.

**Color:** Baddeley & Attewell 2009; Regier et al. 2015

**Kinship:** Kemp & Regier 2012

**Number:** Xu & Regier 2014
Informative communication

Words should have meanings that allow accurate mental reconstruction by listener of speaker’s intended meaning.

Jameson & D’Andrade, 1997
Are **attested** spatial semantic systems more informative than most **hypothetical variants** of those systems?
Maijiki
Conclusions

• Spatial semantic systems across languages support near-optimally informative communication.

• Such systems may reflect functional adaptation for informativeness.

• The same principles also account for semantic variation in other domains.
Open questions

• What is the **process** by which languages adapt to putative functional pressure?

• The **Sapir-Whorf** hypothesis: does language shape the underlying space?

• Are communicative needs themselves **culture-specific**?