Semantic Typology Lab
Open house, February 22, 2013

preemptive thanks to Juergen Bohnemeyer for excellent slide material!!!

ST lab open house Spring 2013
Overview

- what is semantic typology?
- why study crosslinguistic semantic variation
- summary

What is semantic typology?

- categorization

Figure 1. *The spork dilemma*

http://karenjlloyd.com/blog/2009/01/08/extreme-close-up-wall-e/

What is semantic typology (cont.)

- semantic categorization
  and language specificity

green

Yucatec *yáax*

blue

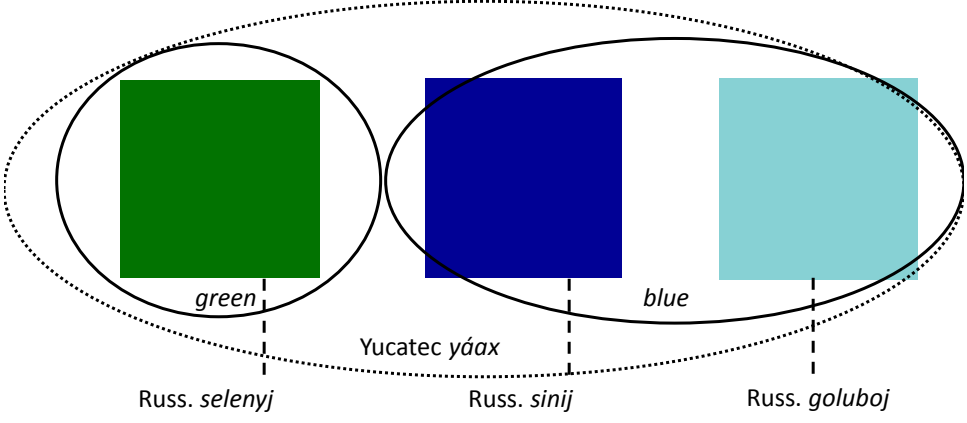Russ. *selenyj*

Russ. *sinij*

Russ. *goluboj*

Figure 2. *Basic color terms in the "grue" domain*

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What is semantic typology (cont.)

• semantic typology: distribution

Figure 3. *Green and blue terms in WALS (Kay & Maffi 2011)*

What is semantic typology (cont.)
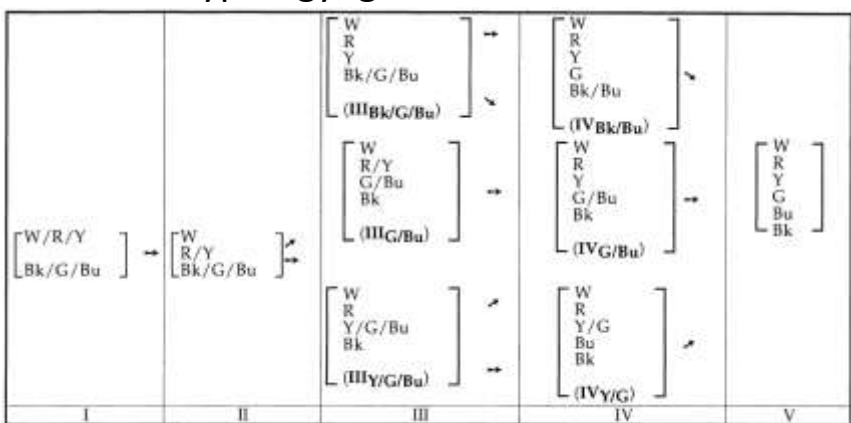
• semantic typology: generalizations

Figure 4. *Stage model of implicational generalizations, covering 83% (91/110) of the languages of the World Color Survey (Kay & Maffi 1999: 748)*

What is semantic typology (cont.)

- history
  - phase I: explicit typological research on semantic categorization starts in the late 19th century
    - mostly with questionnaire studies such as
      - Morgan 1871 on kinship terminology
      - Darwin 1872 on gesture
    - an early study using non-verbal stimuli: Magnus 1877, 1880 on color naming and discrimination
      - based on a kit of 10 color chips he sent to 61 field investigators
    - much of this research was marred by
      - underdeveloped methods of linguistic analysis
      - racist and social-Darwinist assumptions
  - phase II: ethnosemantic research
    - focusing primarily on individual languages
    - often inspired by the Linguistic Relativity Hypothesis

What is semantic typology (cont.)

  - phase III: resurgence of explicit typology
    - but this time with the benefit of a century of advances in linguistics, cultural anthropology, and cognitive psychology
    - starting with Berlin & Kay's (1969) work on basic color terms
    - in the 1980s
      - Viberg 1984 on perception verbs
      - Dahl 1985 on tense-mood-aspect system
      - Talmy 1985 on lexicalization patterns in motion descriptions

What is semantic typology (cont.)

- some recent studies
  - Pederson *et al.* 1998: spatial frames of reference and spatial categorization in 13 languages
  - Levinson, Meira, & L&C 2003; Khetarpal, Majid, & Regier 2009: semantic similarity of 'topological' spatial relators in 9 languages
  - Bohnemeyer, Eisenbeiß, & Narasimhan 2006: motion event categorization in 17 languages
  - Bohnemeyer 2007: argument structure of verbs of cutting and breaking in 17 languages
  - Bohnemeyer *et al.* 2007: motion event segmentation in 18 languages
  - Regier, Kay, & Khetarpal 2007: semantic similarity of color terms in the 110 languages of the WCS
  - Majid, Boster, & Bowerman 2008: semantic similarity of verbs of cutting and breaking in 28 languages

ST lab open house fall 2012
Overview

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Why study
crosslinguistic semantic variation?

- the answer in a nutshell
  - by studying what is variable across languages
    in semantic representations of the world
    - we are able to discover boundary conditions on which aspects
      of cognition may be
      - **innate**, biologically determined
      - **learned** and **culturally transmitted**

Why study crosslinguistic semantic variation? (cont.)

  - in effect, we are "mapping the nature-nurture divide
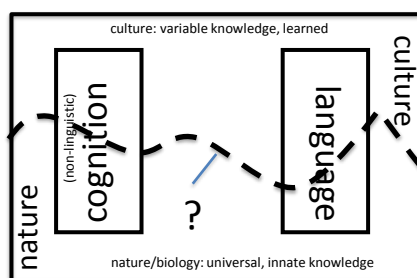   in cognition" (Bohnemeyer 2011)

Figure 4. *Mapping the nature-nurture divide in cognition*

Why study crosslinguistic semantic variation? (cont.)

– in doing so, we clarify the relation
  between language and non-linguistic cognition
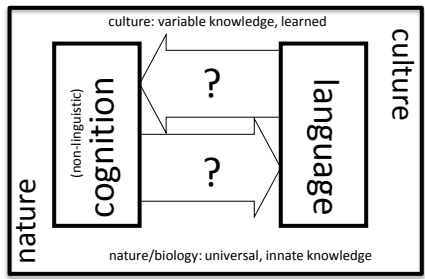 • and contribute to theories of the syntax-semantics interface

Figure 5. *The relation between language and nonlinguistic cognition*

Why study crosslinguistic semantic variation? (cont.)
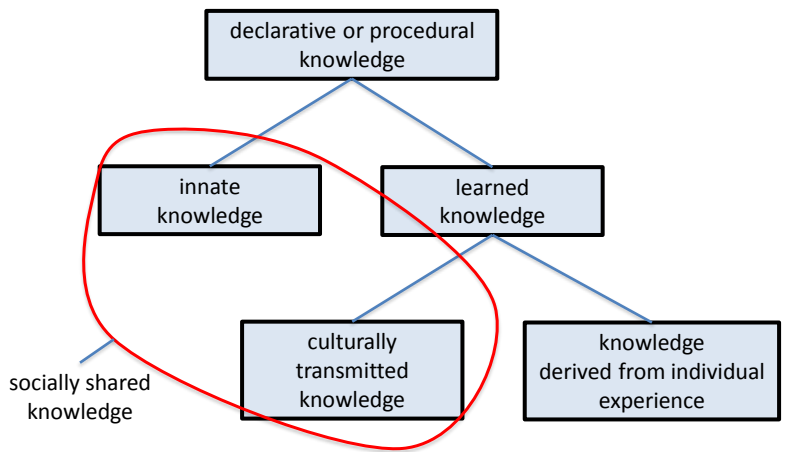
• the rationale: sources of knowledge

Figure 6. *Sources of knowledge*

Why study crosslinguistic semantic variation? (cont.)

- the rationale: the relation between variability and cultural transmission
  - the encoding of cognition in the human genome does not appear to be variable
    - there are – fairly superficial – genetic differences across human populations
    - however, there is currently no evidence suggesting that such differences affect cognition
  - it follows that crosslinguistic variation in a given domain of linguistic knowledge is evidence against innateness

Why study crosslinguistic semantic variation? (cont.)

- the rationale: the relation between variability and cultural transmission (cont.)
  - conversely, absence of crosslinguistic variation in a given domain can have a variety of explanations
    - coincidence
    - variability excluded by the fundamental "design features" of language (cf. Hockett 1963)
    - monogenesis and inheritance from the common ancestor (cf. Dunn et al 2011)
    - innateness
  - strong, exceptionless universals are rare among the languages of the world (Evans & Levinson 2009)
    - nevertheless, many general tendencies and implicational generalizations hold and call for explanations

Why study crosslinguistic semantic variation? (cont.)
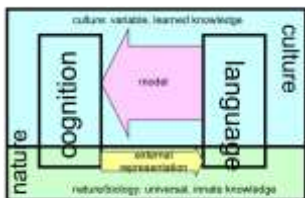
- proposed versions of the "big picture"

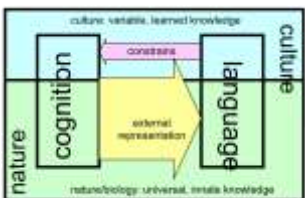**Figure 7.** *The big picture according to Whorf*

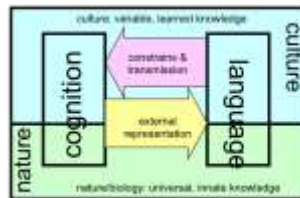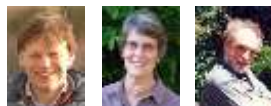**Figure 8.** *The big picture according to the innatists*

Figure 9. *The big picture according to Neo-Whorfians*

- the goal of the "Neo-Whorfian" program
    - restore culture to its rightful place
      in the theory of human cognition

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Summary

- semantic typology
  - the study of universals and crosslinguistic variation in semantic categorization
- semantic categorization – categorization of extra-linguistic reality in linguistic expressions
- crosslinguistic variation as evidence of cultural transmission
  - any aspect of human cognition and language that is variable across populations is unlikely to be innate
  - uniformity across populations is consistent with innateness, but may have alternative explanations

Preliminary list of topics

- Linguistic and non-linguistic determinants of reference frame use (MesoSpace group article)
- Methods in data archiving
- Other developing MesoSpace analyses (bilingualism, convergence, etc) (Kate); stats, experimental design
- Meronymy – English, Nilotic (cows), Endo (Yen-ting)
- Ethnophysiography (Randi), environmental factors
- Xia Lu (cut&break), Su Wang (event structure of metaphor/domain mapping), Tim (meronymy in English),
- Classics: Bryner?? Concept learning (Zubin)
- Wilson Silva – evidentiality & cognition
- Yucatec related projects - if you're looking for a project, ask Juergen!
- Qualifying Paper research ??? (looking at you, 3rd years)

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