University of Washington site update

DELPH-IN Summit
June 18, 2018
Paris

🐬Emily M. Bender, 🐬Jan Buys, Joshua Crowgey, Chris Curtis, Laurie Dermer, Mike Haeger, Michael Wayne Goodman, 🐬Kristen Howell, David Inman, 🐬Angie McMillan-Major, 🐬Elizabeth Nielsen, Woodley Packard, Glenn Slayden, 🐬Olga Zamaraeva

567 Languages (WI 2018)

aqz	Akuntsu	Tupian	Edwards, Holmes
bod	Tibetan (Lhasa)	Tibeto-Burman	Cadigan, Ji
dzo	Dzongkha	Tibeto-Burman	Peck, Tian
eng	English	Indo-European	
gur	Dagaare	Niger-Congo	Owens, Still
scp	Yolmo	Tibeo-Burman	Lindberg, Ng
sje	Pite Saami	Uralic	Nielsen, Spivey

Languages - mapped

lat/long data mostly from wals.info; map by batchgeo.com

Languages - cupcaked
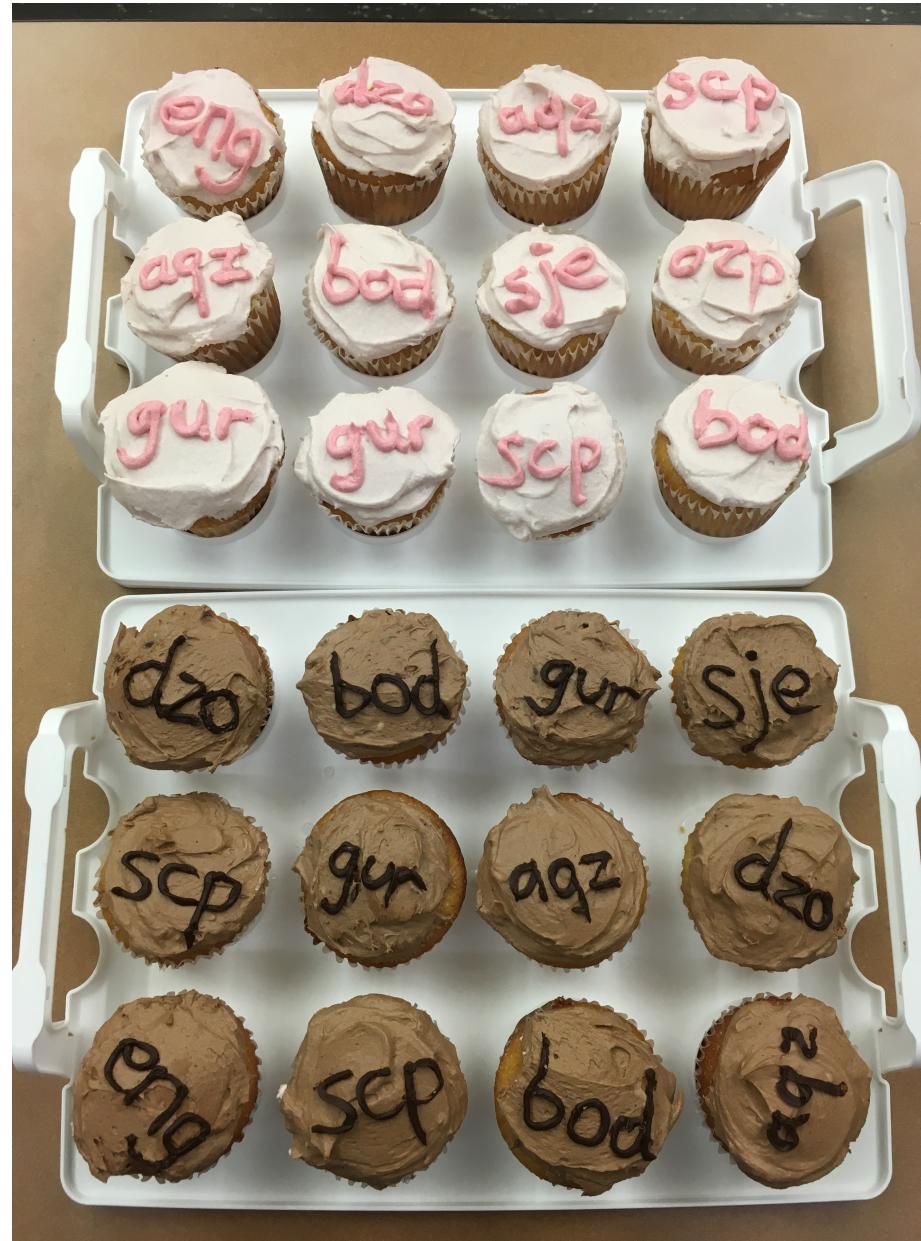
Items with end-to-end output: Final (transfer rule propagation)

|	aqz	bod	dzo	eng	gur	scp	sje
aqz	12	12	11	12	12	13	12
bod	12	15	14	14	12	13	13
dzo	13	15	20	18	14	14	18
eng	14	16	20	23	16	14	21
gur	12	15	17	17	17	13	18
scp	9	12	14	14	9	19	17
sje	11	14	14	16	13	13	19

Grammar Engineering

- Thai (Slayden): C# implementation of CLIMB

- Lushootseed (Crowgey)

- Nuuchahnulth (Inman)

- Ancient Greek (Packard)

Grammar Matrix extensions completed/in progress

- Valence-changing lexical rules (Curtis) MS 2018

- Agreement in NP coordination (Dermer)

- 🐬Clausal modifiers (Howell) COLING 2018

- 🐬Clausal complements (Zamaraeva)

- Nominalized clauses (Howell, Zamaraeva) HPSG 2018

- 🐬Possessives (Nielsen) MS 2018, HPSG 2018

- Evidentials (Haeger) MS 2018

AGGREGATION project
(Bender, Zamaraeva, Howell, Goodman + others)
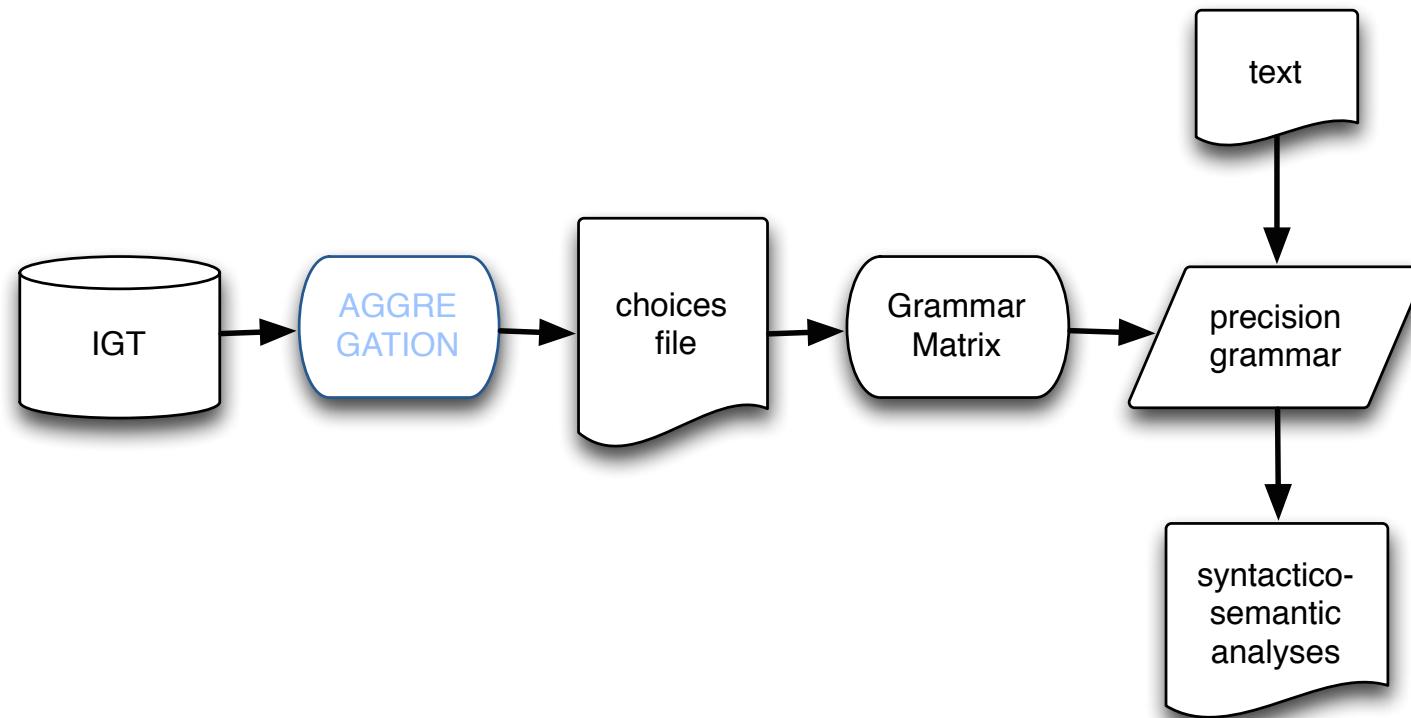
AGGREGATION - Phase II & related

- Grammar Matrix extensions (clausal modifiers, clausal complements)

- Integrating and extending the inference code

- Making our intermediate outputs useful for field linguists

  - MOM + MOM UI

- Automatic generation of IGT (EL-STEC baseline, 🐬McMillan-Major)

567 2019—AGGREGATION-based?

- Field languages only

- Start with inference-created choices files

- Need to recruit field linguists to share their data

DELPH-IN QA discourse site

- https://delphinqa.ling.washington.edu/

- ~400 posts in 7 months, 18 users

- Goals:

  - Make existing solutions to common problems easier to find

  - Overall readability of answers

- Todo: Merge in existing email list

- Todo: Recruit more users!

PyDELPHIN

- v0.7.2 released

- New maintainer?

Dr. Michael Wayne Goodman

- PhD complete :)

- Title: *Semantic Operations for Transfer-based Machine Translation*

- Matches Haugereid & Bond template-based rule extraction without language-specific templates

- Remaining challenges: Mapping nodes across aligned subgraphs, reranker

Deep Learning + Deep Processing

- 🐬Error analysis of Deep Deep MRS output (Buys, Bender, Chen)

- 🐬Neural generation from MRS (Hajdik, Swayamdipta, Buys, building on previous work by Konstas and Goodman)

- 🐬Neural (D)MRS transfer (Goodman, Pham, Buys)

Bender visits to CAS in Oslo

- 🐬 Raising/control safari (Bender, Flickinger)

- 🐬 ESD pages: seeking community input (Bender, Flickinger, Oepen)

- Dimensions of dependents (was: arguments v. adjuncts) (full cast)

- Polymorphic variadic predicates (full cast)

- 100 things sem & prag (slow progress, with Lascarides)

COLING 2018

- Emphases on:

  - Reproducibility

  - Error analysis

  - Linguistic diversity

  - Linguistic relevance

- UW Linguistics papers: Howell & Zamaraeva (clausal mods), Zamaraeva et al (Improving feature extraction for pathology reports using ERG)

http://coling2018.org/pc-blog