COMMUNICATING IN LANGUAGE ABOUT LANGUAGE

- Languages are neither fixed across time nor identically reproduced in all speakers, but rather continually renegotiated during interactions [7].
- People accommodate to each other’s usage patterns [16], form temporarily lexical pacts [8, 3], and instruct each other about their linguistic views [18, 39].
- Some of this communication in language about language is direct, as with explicit definitions, but much of it arrives via secondary pragmatic inferences.
- Disjunction supports what appear to be opposing inferences about language:
  - Hurfordian pressure [21]: \( X \lor Y \) conveys that \( X \) and \( Y \) are disjoint
  - Definitional inference [20]: \( X \lor Y \) conveys that \( X \) and \( Y \) are synonymous
- This pattern is cross-linguistically robust, so we seek a single pragmatic model that can derive both of these meanings from the semantics of disjunction given different contextual assumptions.

HURFORDIAN PERCEPTIONS AND INTENTIONS

Generalization: \( X \lor Y \) usually conveys that the speaker is using a lexic in which \([X]\) and \([Y]\) are disjoint, or it addresses a speaker concern that the listener is using such a lexic.

No clear evidence for ordering restrictions or preferences deriving from the entailment relation:

<table>
<thead>
<tr>
<th>Disjunct order</th>
<th>Our corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>[general] or [specific]</td>
<td>79 Exs.</td>
</tr>
<tr>
<td>[specific] or [general]</td>
<td>90</td>
</tr>
</tbody>
</table>

The frequency of \( X \lor Y \) correlates with the prevalence of \( X \) implicating not \( Y \) [5].

DISJUNCTIVE DEFINITION AND IDENTIFICATION

Generalization: \( X \lor Y \) can convey \([X] \approx [Y]\) when the speaker is mutually, publicly known to be an expert or to be an expert or to understand the terms involved.

- She’s a wine lover or oenophile.
- Title: A Geological History of Manhattan or New York Island
- Welcome to New Haven or “the Elm City”.
- It’s a woodchuck, or land beaver.

Attested in Chinese, German, Hebrew, Ilokano, Japanese, Russian, and Tagalog. Seems to survive even in a word order relation:

\[
S_2(m \mid w, \mathcal{L}) \propto \exp \left( \alpha \log \left( L_1(w \mid m, \mathcal{L}) \right) + \beta \log \left( L_2(w \mid \mathcal{L}) - C(m) \right) \right)
\]

DEFINITIONAL CONTEXTS

Require low disjunction costs and high \( \beta \): the speaker is invested in communicating about the icon and can tolerate the cost of a disjunction that is synonymous with one of its disjuncts.

\[
\begin{align*}
L_2 & \text{ hears } A \lor X \\
\mathcal{L} & = \left\{ A \mid w_1, B \mid w_2, X \mid w_3 \right\} \\
\mathcal{L} & = \left\{ A \mid w_1, B \mid w_2, X \mid w_3 \right\} \\
\alpha & = \beta = \gamma \end{align*}
\]

CHARACTERIZATION

Summarizes a search over many parameter settings using a large lexic and large world space.

FURTHER INFORMATION

Paper, references, model code, corpus data: http://github.com/cgpotts/pypragmods/