The Extended SPaRKy Restaurant Corpus

designing a corpus with variable information density

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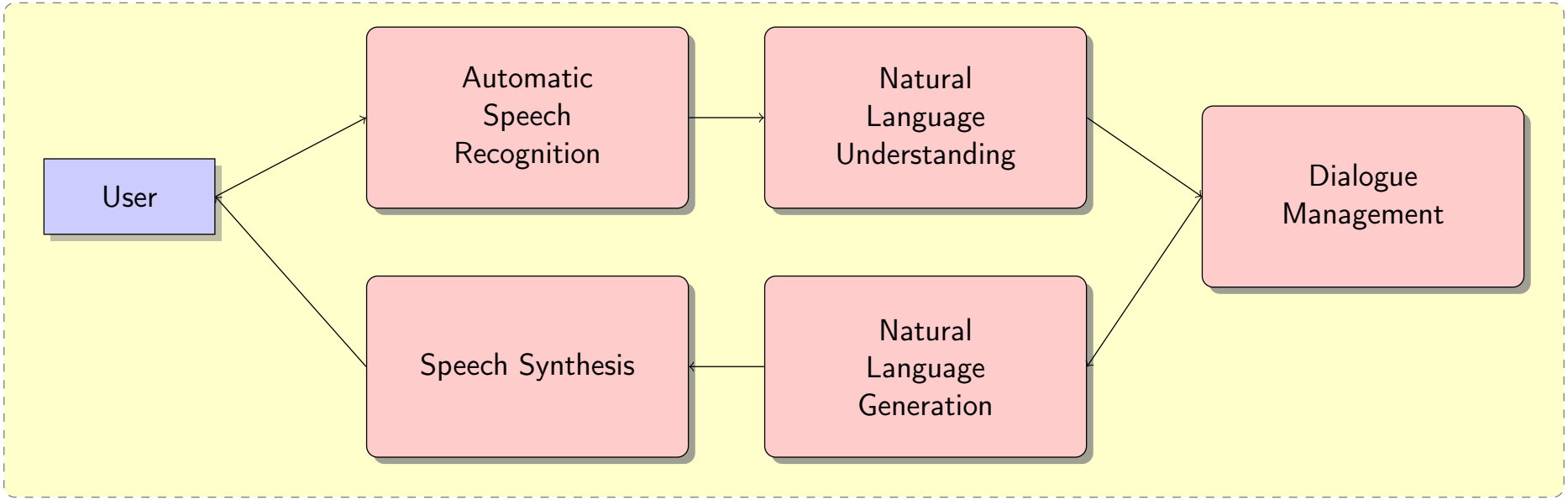
Spoken Dialogue Systems



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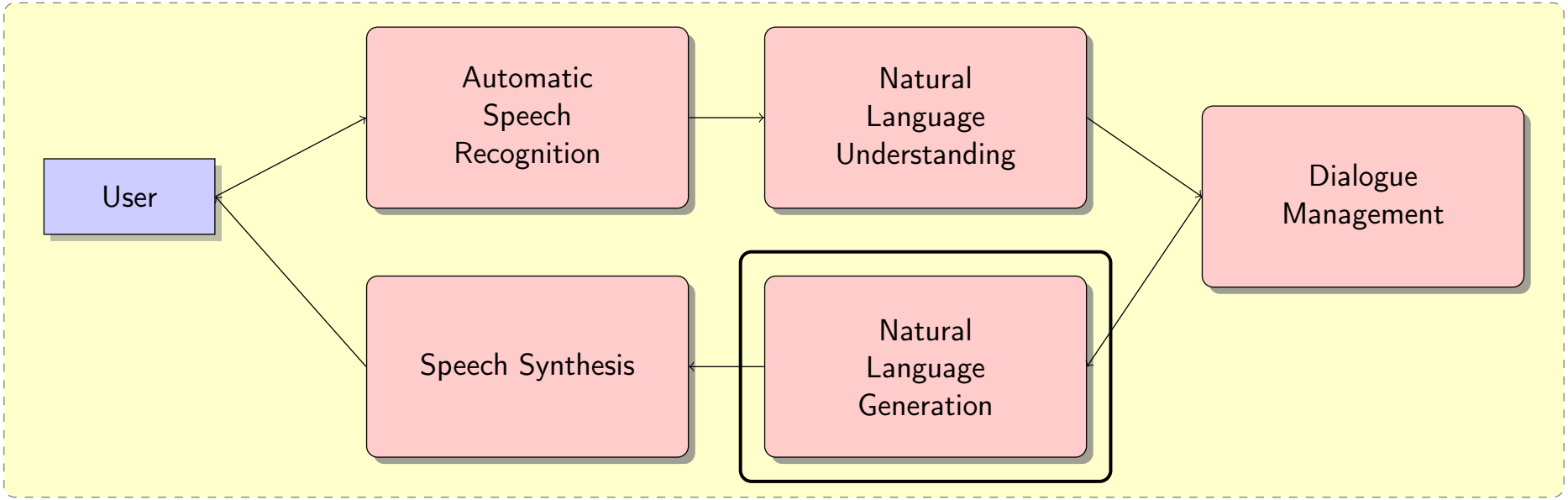

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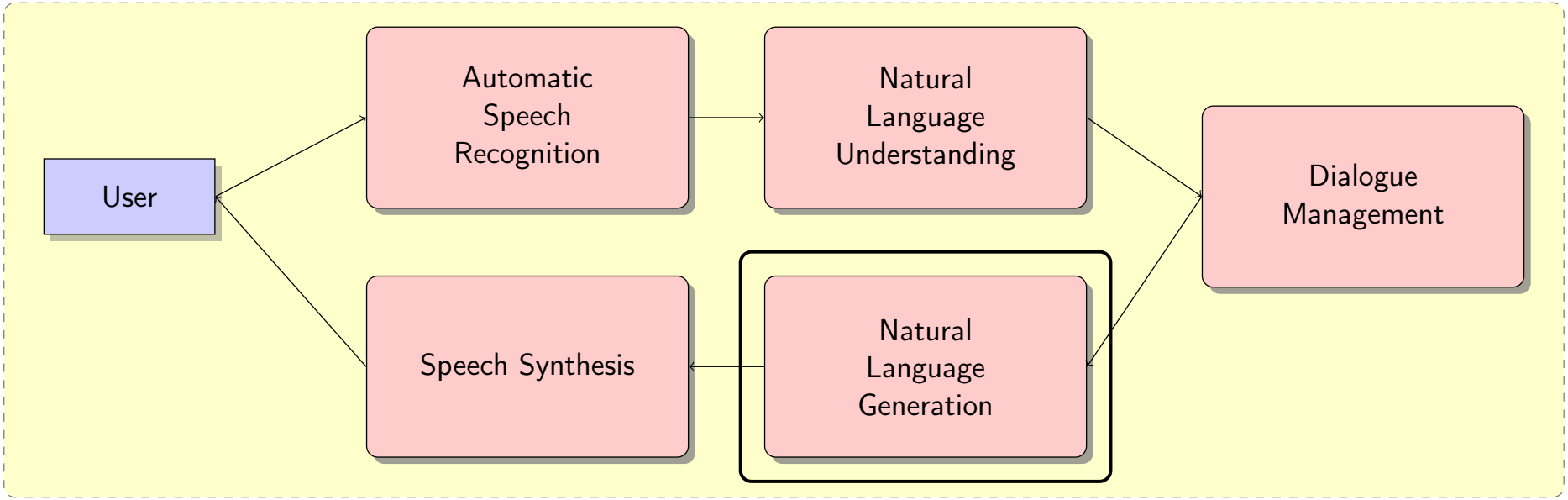

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Due Fratelli	$$	Italian
Andalucia	$$$	Spanish, Seafood

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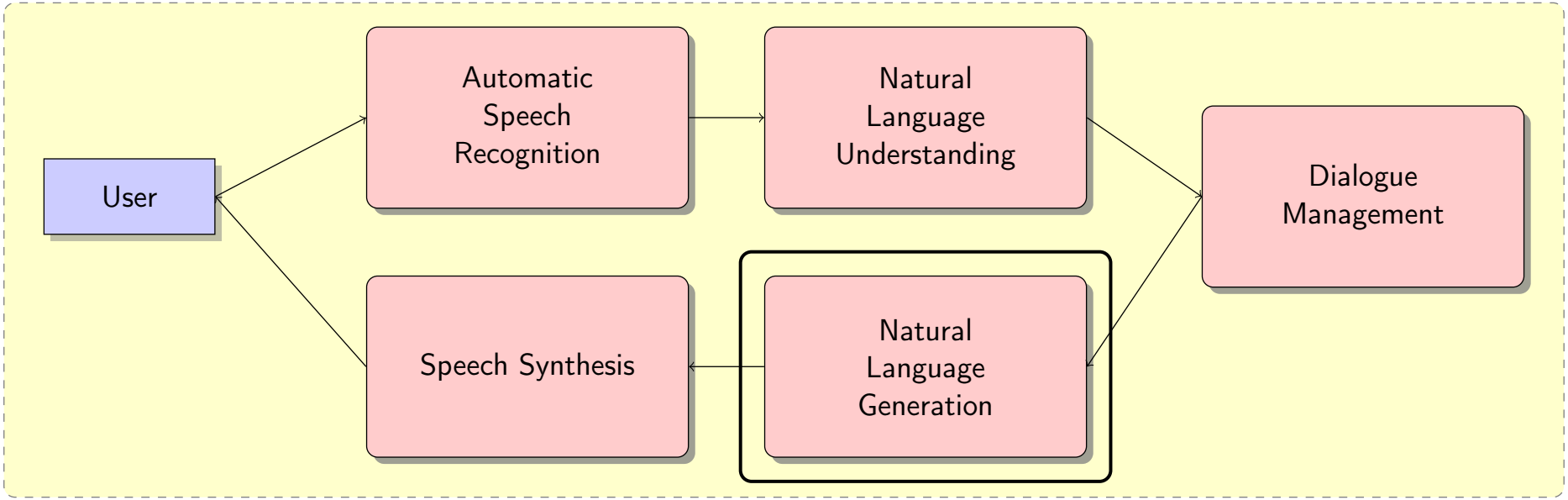

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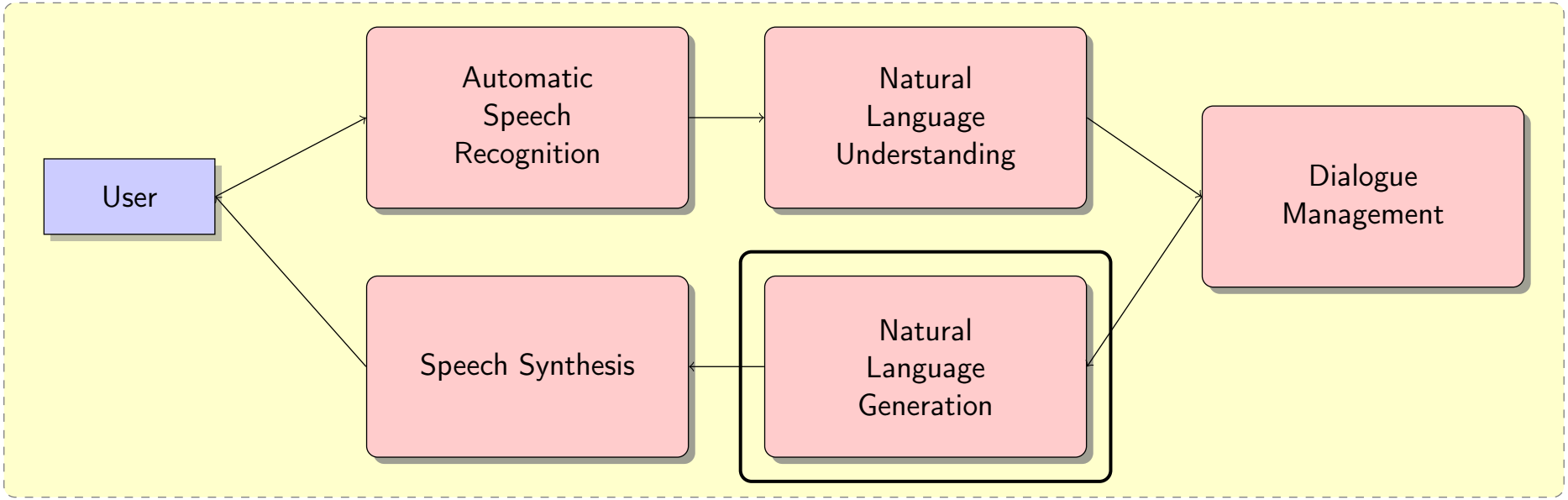

Adapting linguistic complexity (specifically, information density)

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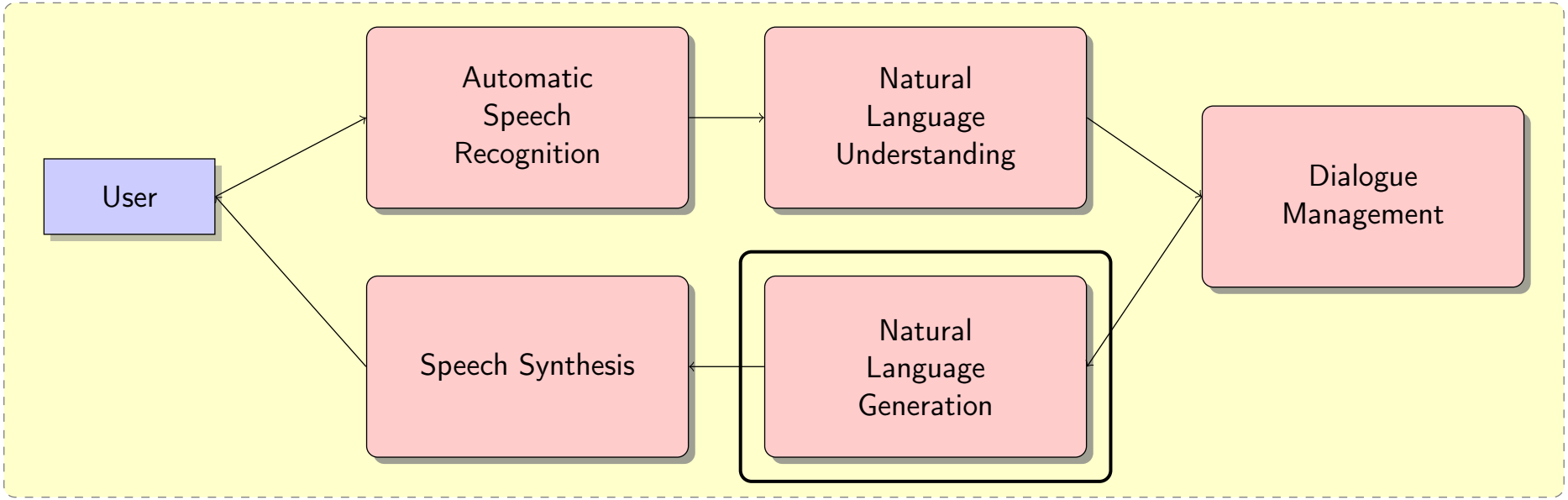

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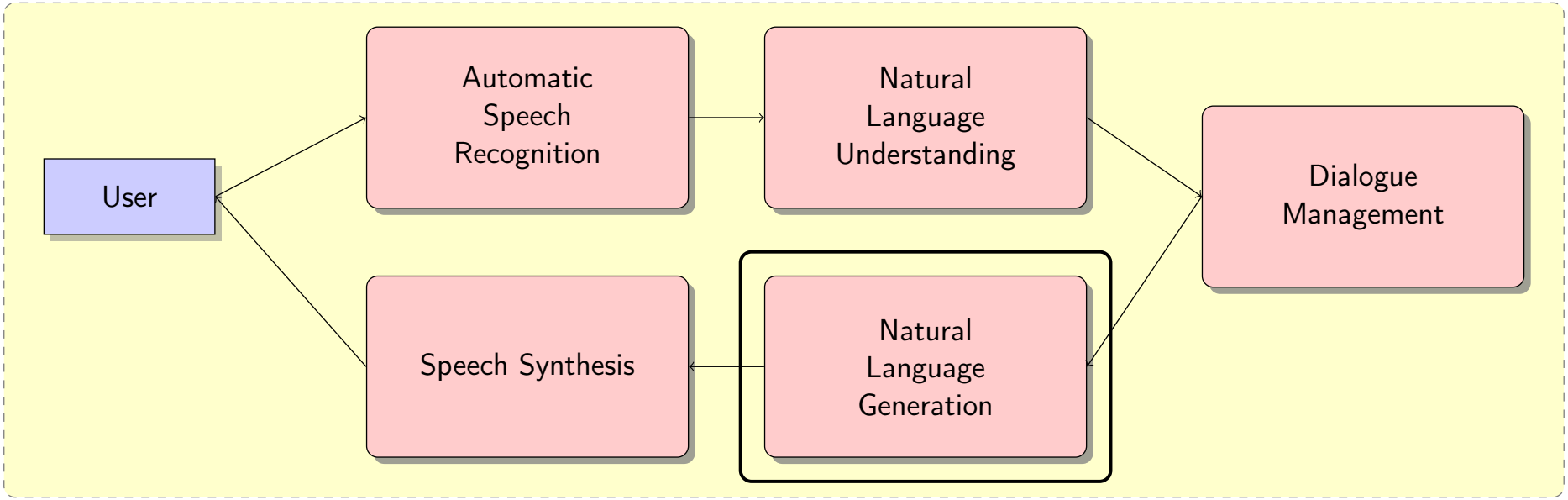

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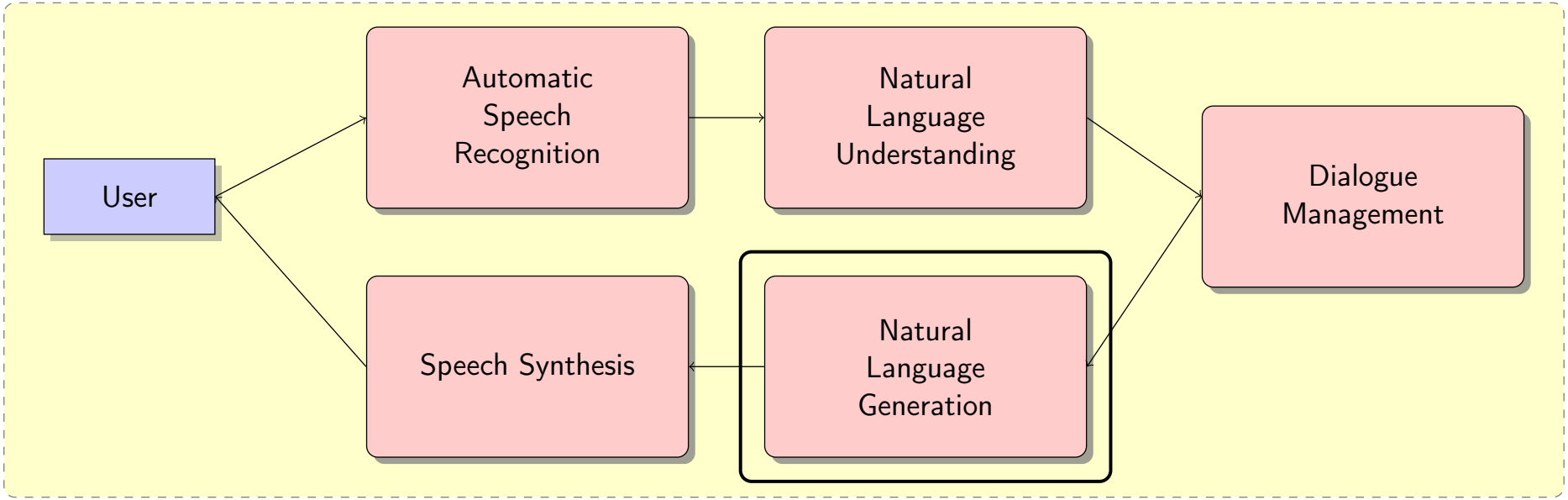

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Either way, we need a corpus with meaning representations!

Discourse-level meaning representations

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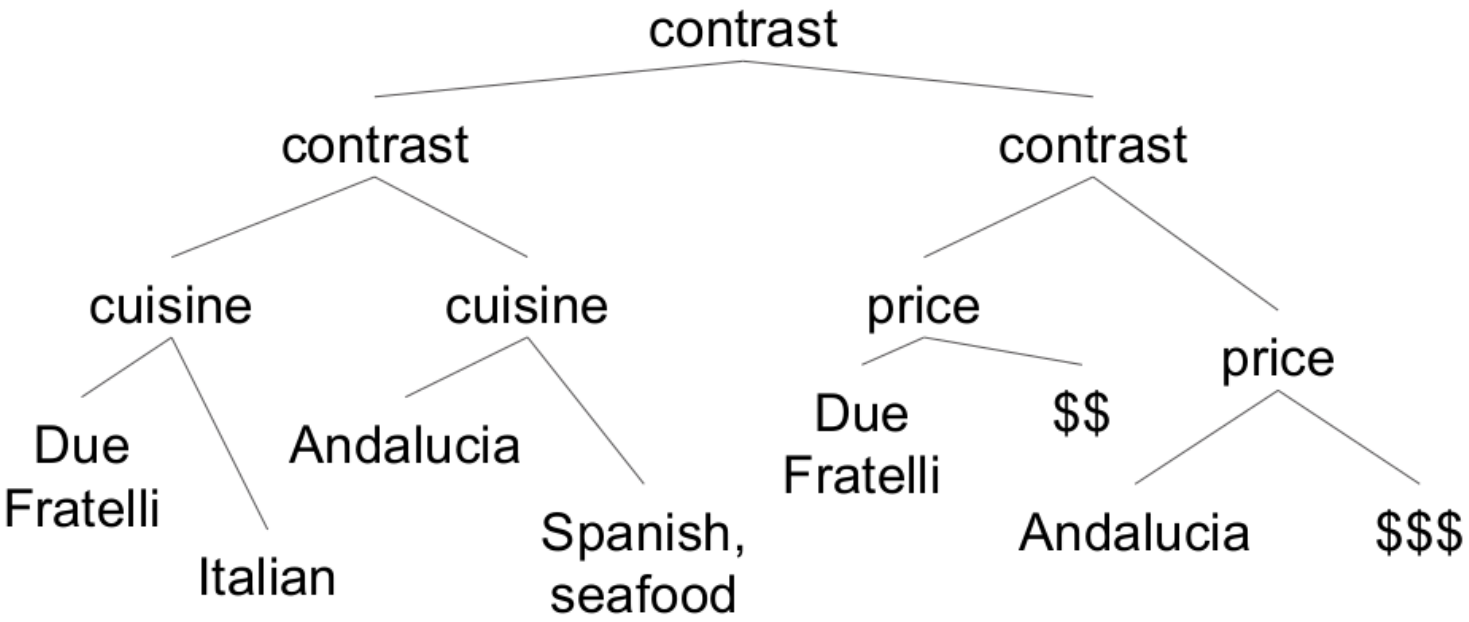

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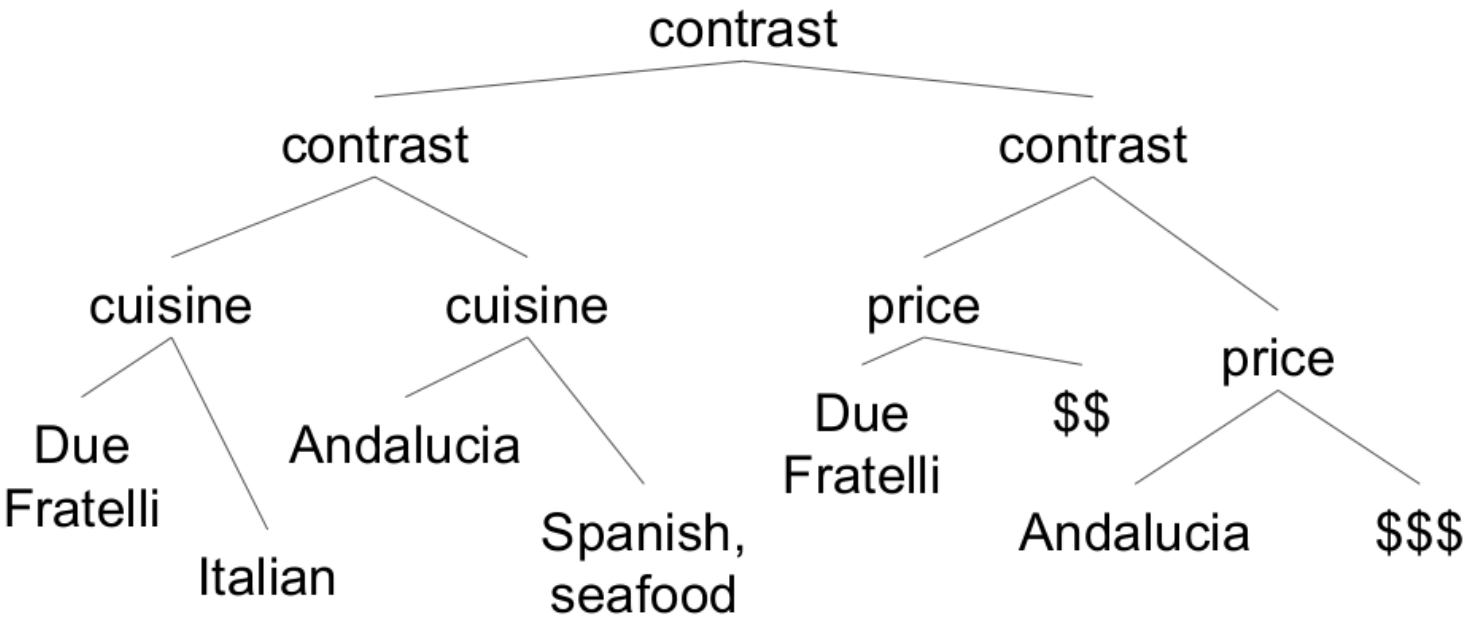

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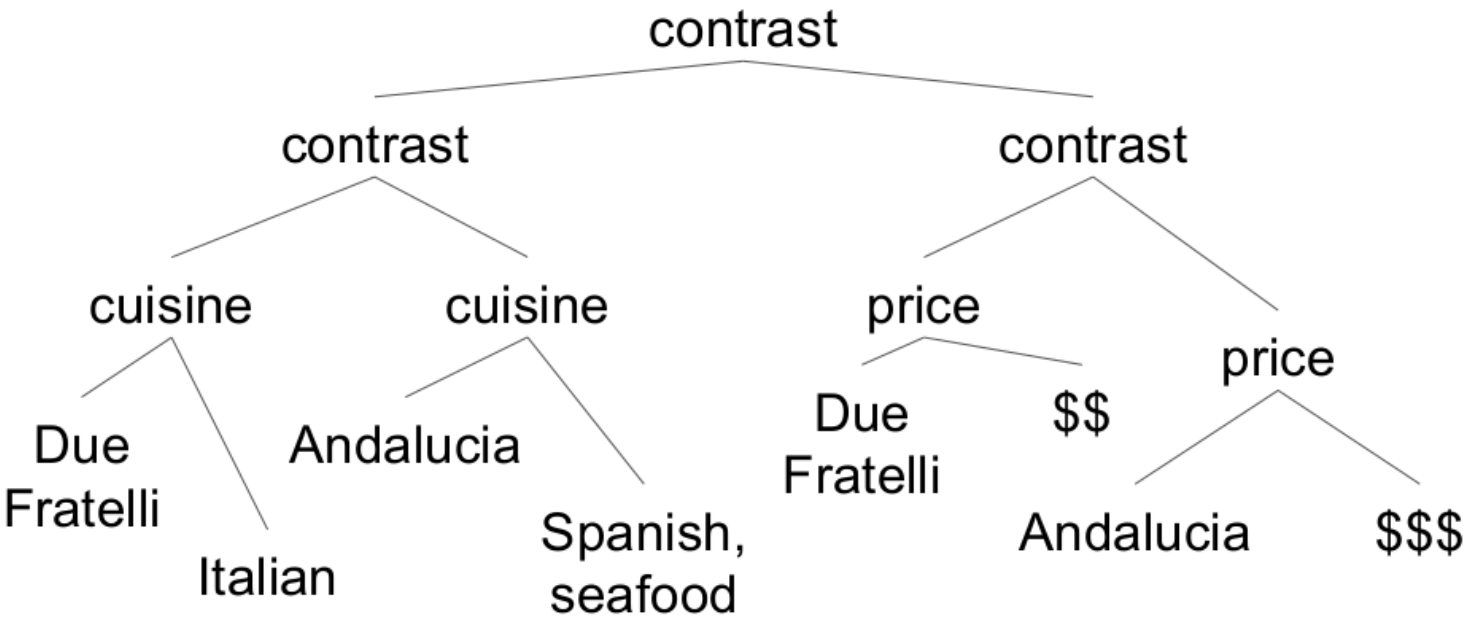

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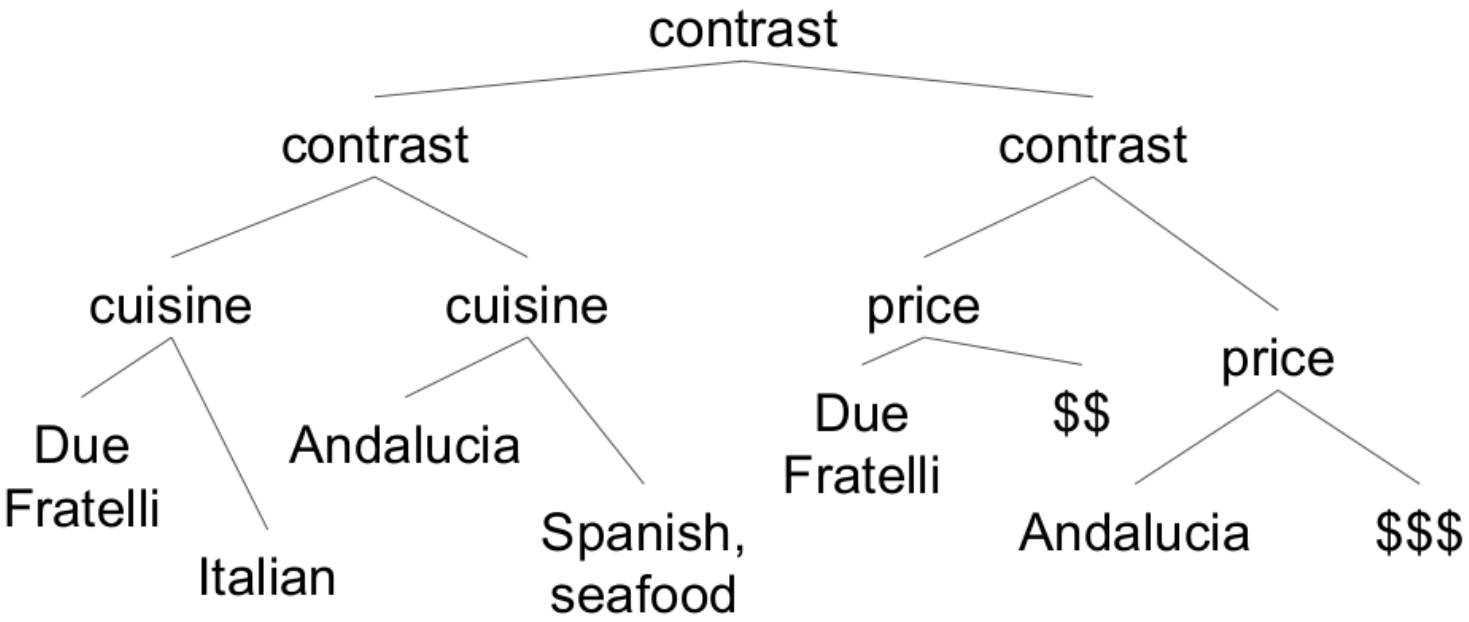

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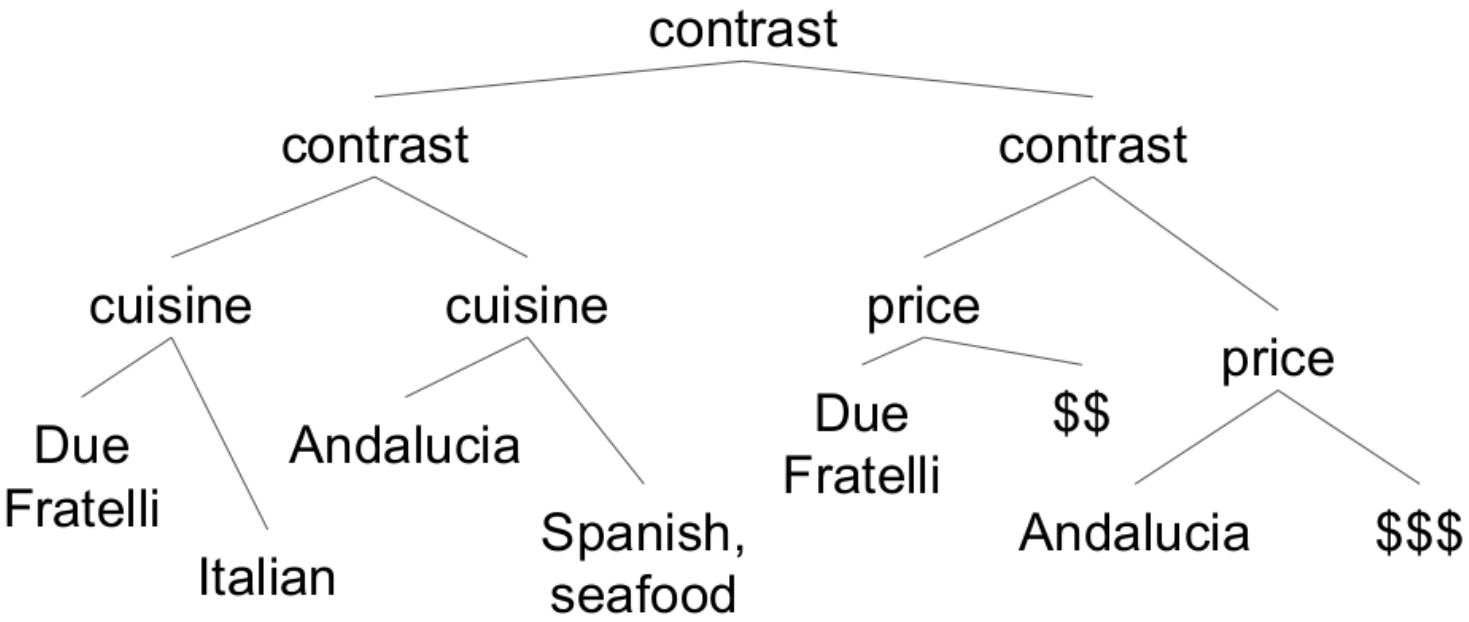

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- The SPaRKy Restaurant Corpus (Walker et al. 2007)
  - 1800 texts from an NLG system
  - discourse semantics, but limited variation

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E2E Challenge Dataset (Novikova et al. 2017)

- 50k utterances+DAs
- same (image-based) elicitation

Building the corpus

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2 conditions: default vs. elderly audience

We are adding variety to an existing dialogue system and we need your help!

In this task, you will be given a text about one or more restaurants written by our existing system.

Your job is to express the same facts, describing the restaurant(s) as you would describe them to your...
default: **...friends or family.**
elderly: **...85-year-old grandmother.**

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- about 5k texts, with discourse-level semantic annotations

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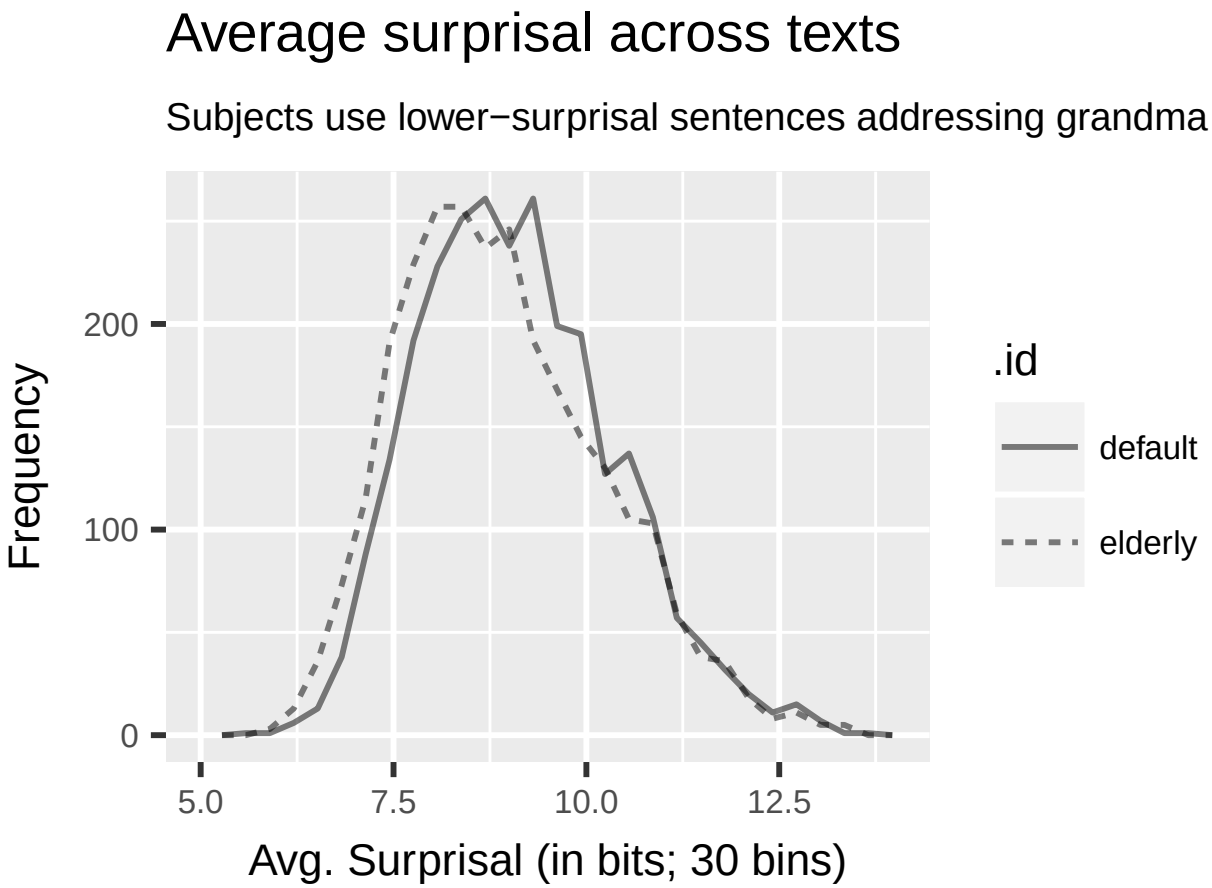
- significantly lower information density in the elderly condition



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Choose Caffe Buon Gusto if you desire a traditional Italian restaurant. Otherwise, try out John's Pizzeria.

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cf. Caffe Buon Gusto is an Italian restaurant. John's Pizzeria, on the other hand, is an Italian, Pizza restaurant.

Examples (2)

Chez Joesphine is the best choice because of food quality, service and decor.

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cf. Chez Josephine has the best overall quality among the selected restaurants. It has very good service, with very good decor. It has very good food quality.

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Thank you!

Did we achieve greater lexical variety?

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SFX-restaurant	5192	353
Novikova et al.	1243	238
Original SRC	1760	99
Extended SRC	**5356**	**577**

Table: Vocabulary diversity and corpus size