Semantic subcategorisation for creative generation of light verb constructions

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We need transparent language models, based on linguistics & cognitive science

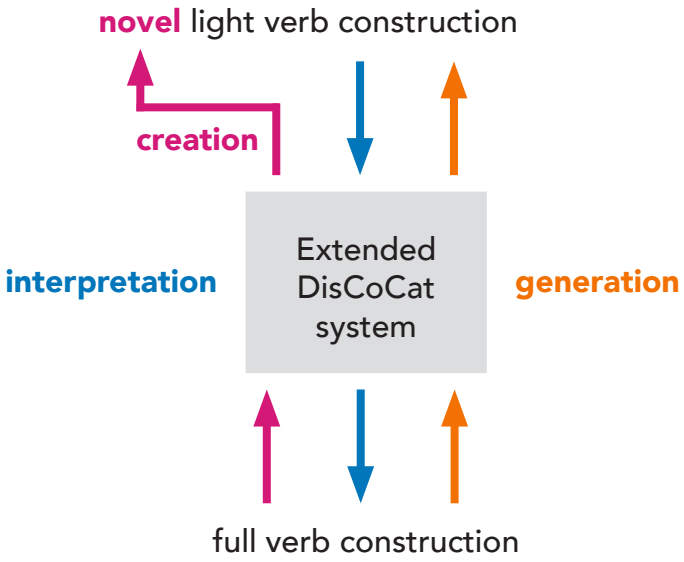
Knowing which expressions are correct is hard for second language learners (2LLs).

"*grab a snack*"
"**grab a beef stew*"

*not semantically idiomatic

application: Personalised technology can help 2LLs with mastering these expressions

I am developing a system that generates novel light verb constructions



I am extending the DisCoCat framework for creative natural language generation

Distributional semantics

Compositionality

Category theory

language = syntax × semantics

sentence embedding | word type | word embedding

Light verb constructions have a complex predicate that is semantically bleached

light verb construction	full verb construction
to ***grab*** a shower	to ***shower***
to ***make*** an effort	to ***try***
to ***do*** a revision	to ***revise***

Classical part-of-speech categories are insufficient for text generation

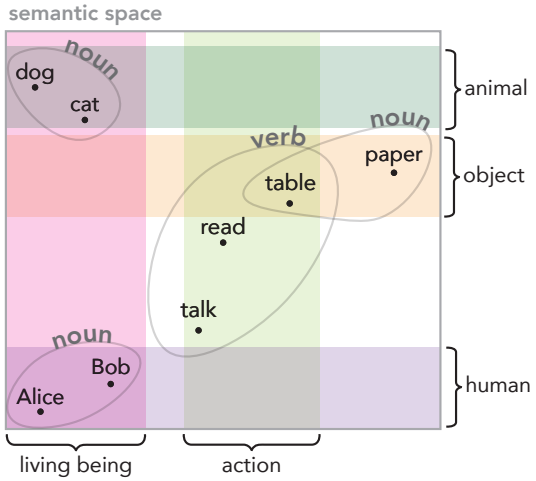
We want:
Alice read a paper.
Alice read a table.
Alice tabled a paper.
Alice talks.

We don't want:
*The dog read a table.
*The paper read a cat.
*Alice talked a paper.
*The table talks.

This research will give us a deeper insight on how semantic spaces interact.

This will contribute towards more transparent and explainable technology.

We need to subcategorise word types to account for selectional restrictions



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