



A Construction for Universal Dependencies

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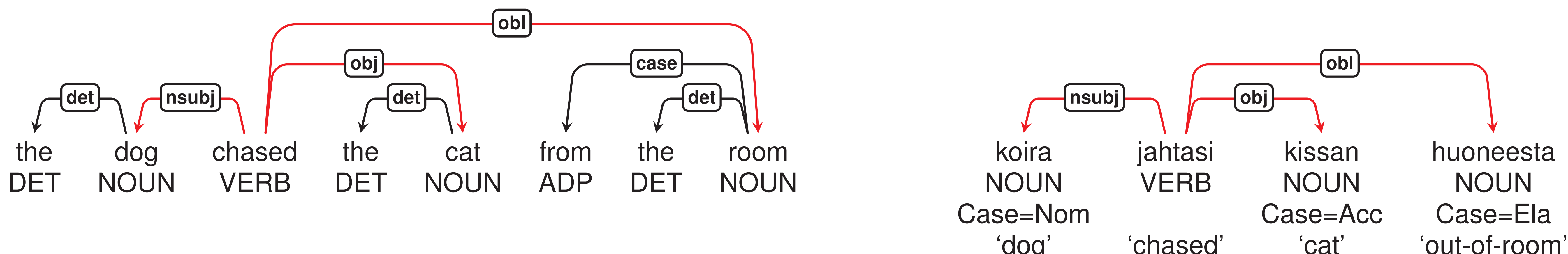
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Universal Dependencies

- A framework for cross-linguistically consistent morphosyntactic annotation of the world's languages [de Marneffe et al., 2021].
- Brings out similarities (and differences) across languages by maximizing the number of parallel structures.
- Gives priority to direct syntactic relations between content words, such as verbs, nouns and adjectives.



Constructions and Strategies

- Two types of comparative concepts from functionally oriented linguistic typology [Croft, 2022]:
 - **Construction:** Any pairing of form and function used to express a particular combination of semantic content and information packaging.
 - **Strategy:** A construction used to express a particular combination of semantic content and information packaging (the 'what'), that is further distinguished by certain characteristics of grammatical form that can be defined in a crosslinguistically consistent fashion (the 'how').
- The existing UD guidelines are essentially based only on cross-linguistically identifiable strategies – not universal constructions.

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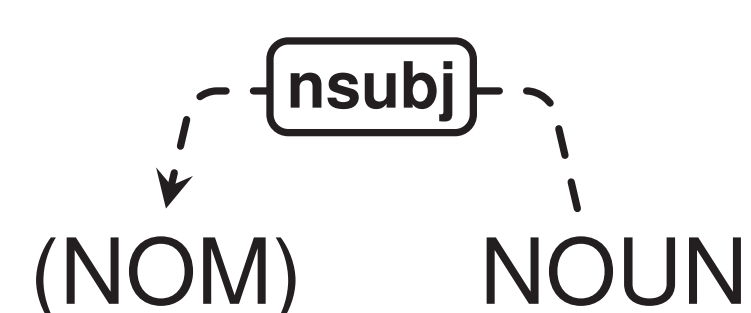
- What is a construction for UD?
 - An inventory of universal linguistic *constructions*.
 - For each construction, an inventory of common *strategies* for realizing that construction in the world's languages.
 - For each construction-strategy pair, a cross-linguistically applicable UD analysis and representative examples from different languages.
- What can it be used for?
 - Improve cross-linguistic consistency, provide better support for adding new languages to UD, and identify gaps in existing guidelines.
 - Defining a fine-grained morphosyntactic typology based on the statistical distribution of strategies across constructions and languages.
 - Evaluate and understand large language models, complementing more surface-oriented work on probing and targeted syntactic evaluation.

Case Study: Predicate Nominals

- **Predicate nominal construction:** a clause construction defined by the function of predicating an object concept of a referent – that is, asserting what object category the referent belongs to. Example: *Ira is a writer* is an example of an English predicate nominal construction; it predicates that the referent of *Ira* belongs to the category of *writer* [Croft, 2022].
- **Strategies:**

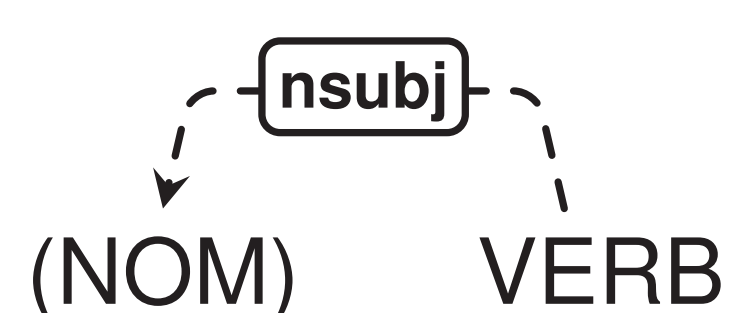
Zero

Waskia
aga bawa taleng-duap
my brother policeman
'my brother is a policeman'



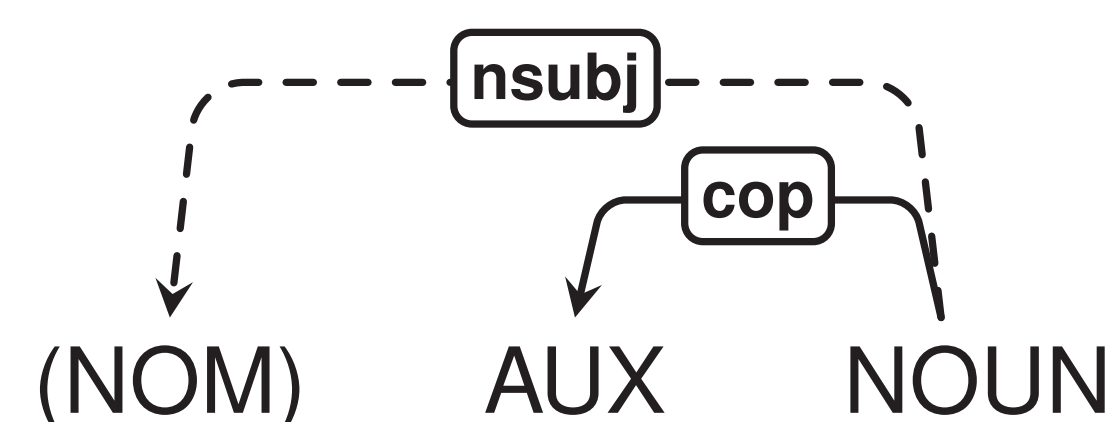
Verbal

Classical Nahuatl
ni-ticitl
1SG-doctor
'I am a doctor'



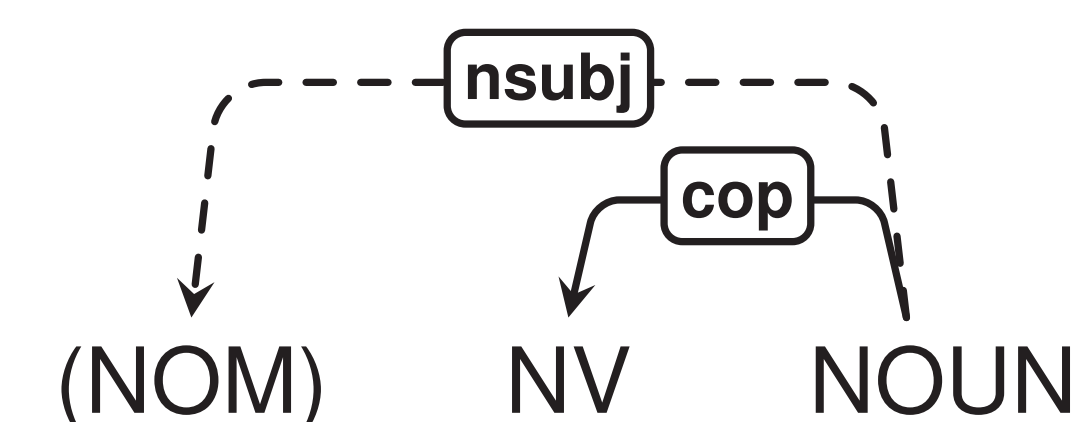
Verbal copula

French
elle est médecin
she is doctor
'she is a doctor'



Nonverbal copula

Nakanai
eia la taua
3SG DEM spirit
'he is a spirit'



References

William Croft. *Morphosyntax: Constructions of the World's Languages*. Cambridge University Press, 2022.

Marie de Marneffe, Christopher D. Manning, Joakim Nivre, and Daniel Zeman. Universal Dependencies. *Computational Linguistics*, 47:255–308, 2021.

