

# THE CATEGORIAL ANATOMY OF ADJECTIVES

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√v @ QMUL ★ June 17, 2017

UNIVERSITY OF CYPRUS ★ [www.adjective.world](http://www.adjective.world)

- ① Categorical ontology
- ② A categorical biverse for adjectives
- ③ Evidence: English & Typology
- ④ Parametrisation: future goals
  - First results and empirical outlook

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→ [Categorical biverse and empirical data](#)

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# CATEGORIAL(ITY $\mathcal{G}$ ) ONTOLOGY

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CATEGORIES: WHAT'S THE POINT?

## CATEGORIES: WHAT'S THE POINT?

- Lexical categories analysed as being about **interpretation**, and **not shallow taxonomic categories**.
- Categories enable visibility and the onset of a derivational procedure.
- They are, arguably, fundamental also in the interpretative component.

# CATEGORIAL(ITY $\mathcal{G}$ ) ONTOLOGY

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CATEGORIAL SEMANTICS? PERSPECTIVES OF  
MEANINGS

## CATEGORIAL MEANING?

- Lexical categorality is meaningful: categories [N] and [V] encode **fundamental interpretive perspectives**:

[N] encodes a **sortal**, hence nouns are *kinds*.  
(Panagiotidis, 2015) Alternatively, they lack **temporal parts**.

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- Properties have to be conceived as unary predicates.
  - “Properties are the semantic counterparts of natural language predicative expressions.” (Chierchia and Turner, 1988)
- Extensions of properties are therefore sets.
- ∴ Type-theoretically, then, **adjectives = verbs = nouns**
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## ADJECTIVES CANNOT SIMPLY BE PROPERTY-DENOTING

- **No unitary characterisation** in terms of an interpretive perspective seems possible for adjectives.
- **No [A] as a lexical-categorial primitive.**

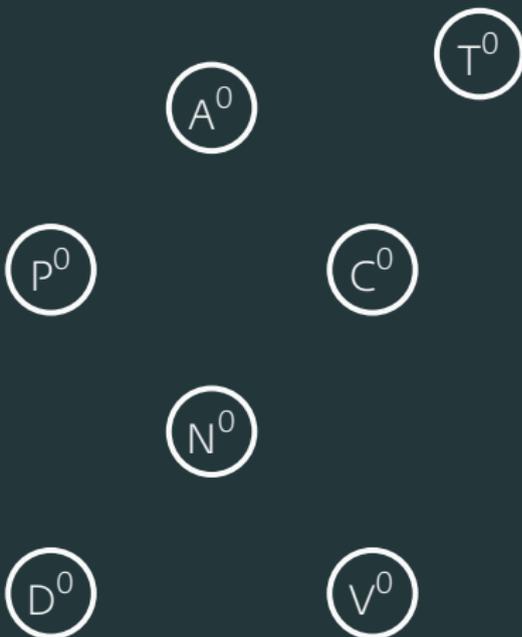
# CATEGORIAL(ITY $\mathcal{G}$ ) ONTOLOGY

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THE CATEGORIAL UNIVERSE

How many  
categories are  
there?

- 1?
- 2?
- 3?



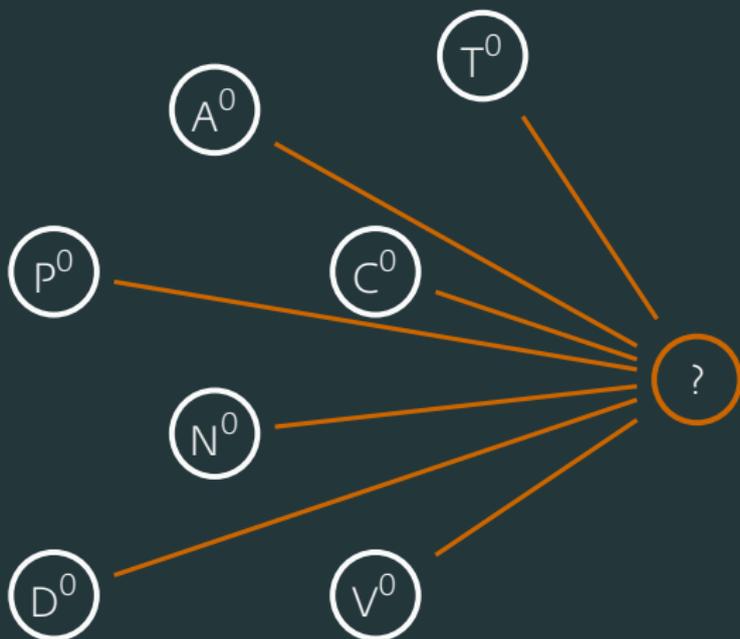
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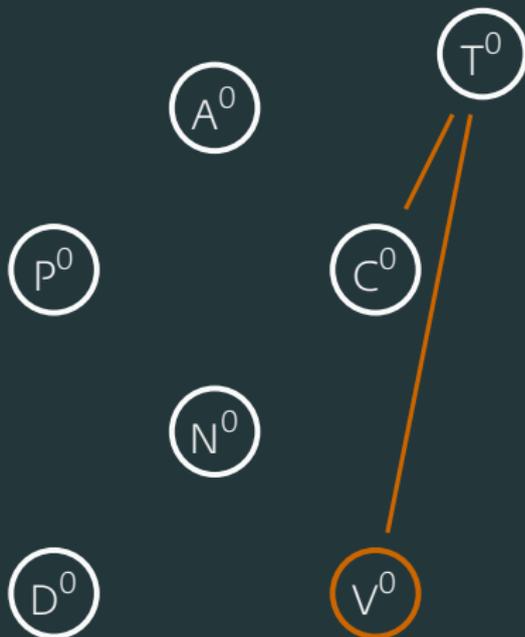
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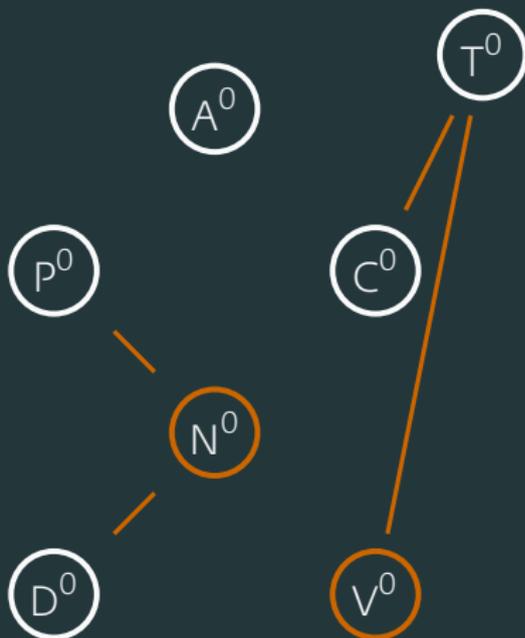
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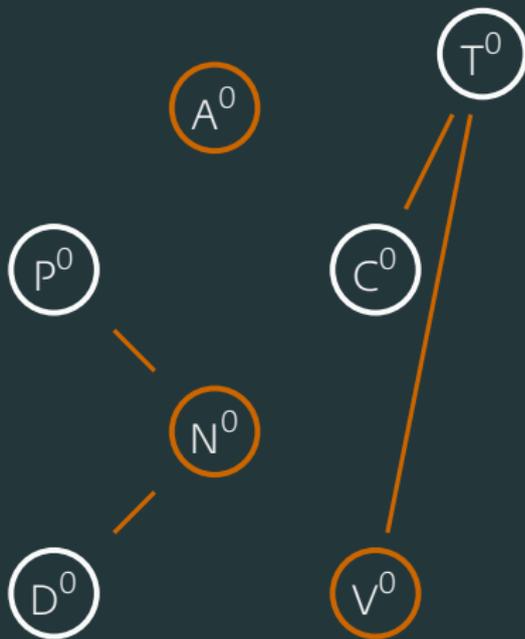
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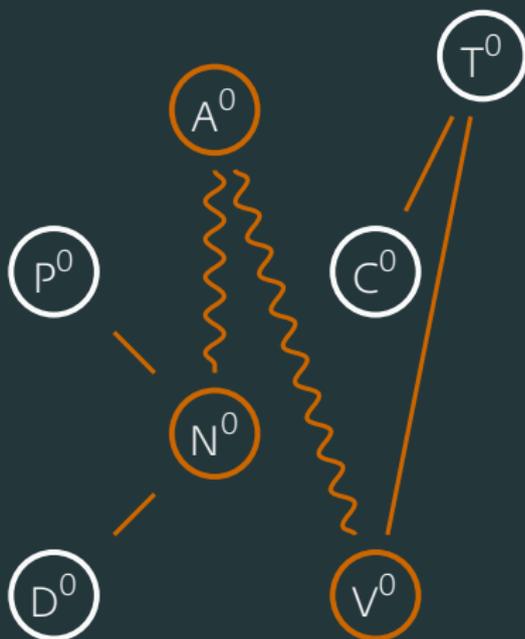


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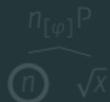
# TOWARDS A BIVERSE FOR ADJECTIVES

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# A TRIVERSAL THEORY OF CATEGORIES (STATUS QUO)

$$\cdot C_T = \{n, v, a\}$$

## Nouns



## Verbs



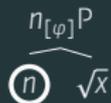
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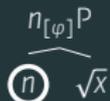


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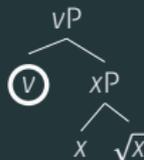
- The intuition behind a categorial biverse is not new.
- Chomsky first proposed the categorial-featural makeup of adjectives as [**v**, **N**]
- *Ceteris paribus*, this view is untenable, for three reasons:
  - [**N**] and [**v**] contradict each other in their interpretative perspectives (Baker, 2003; Panagiotidis, 2015)
  - [**N**] and [**v**] cannot yield a single categorial label
  - [**N**] and [**v**] also clash type/sort-theoretically (Mitrović, 2017)
- How to resolve this? And how are [**N**] and [**v**] structured to begin with?

$$\cdot \mathcal{C}_B = \{n, v\}$$

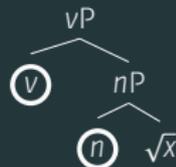
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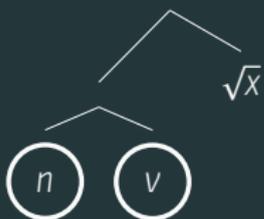
### The derivational life of an adjective

- The **root** ( $\sqrt{x}$ ) and the **composite head** ( $\{n, v\}$ ) enter the derivation.
- and (externally) merge
- The SO contains a clash and is unlabellable, halting the derivation.
- Labelling is resolved via **excporation of  $v$**  (as signalled by  $\lambda$ ).
- The resulting SO is type-compatible and labellable.



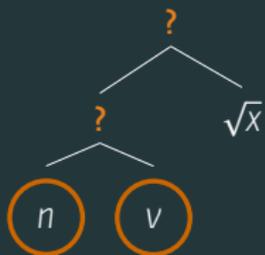
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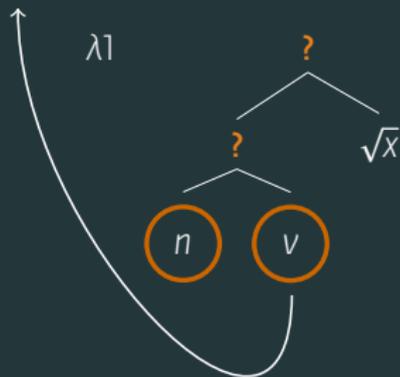
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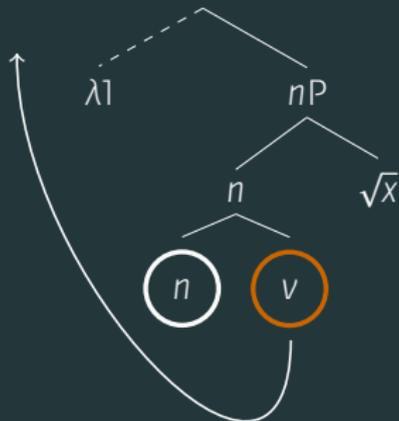
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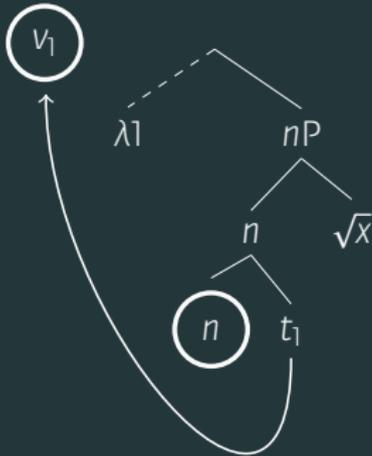
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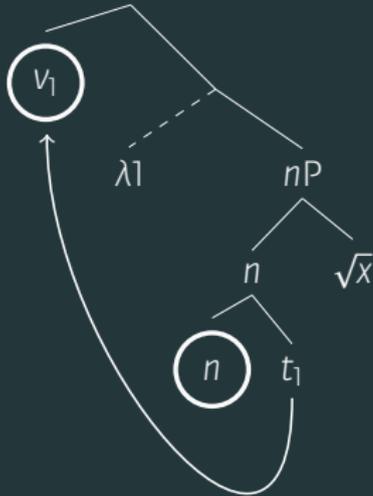
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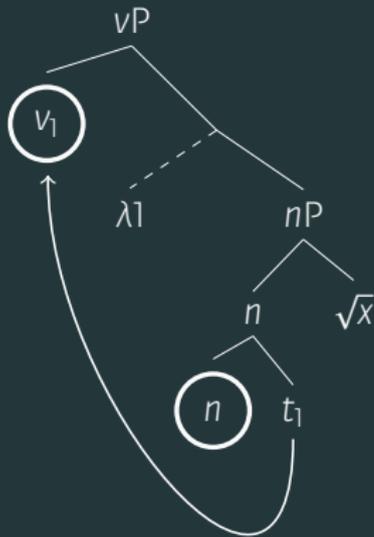
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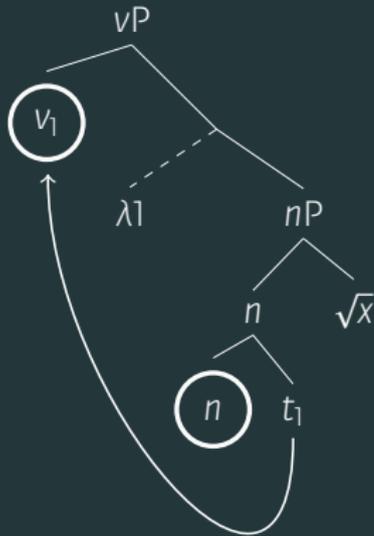
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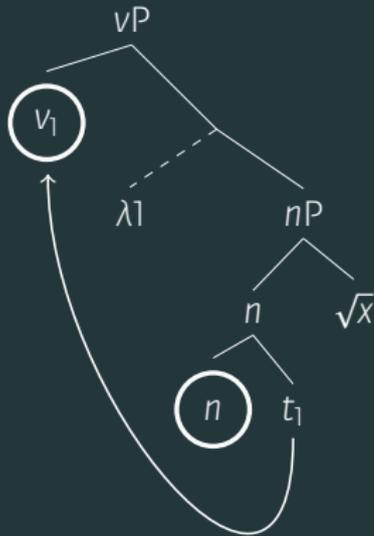


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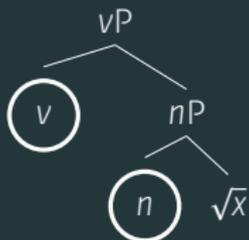
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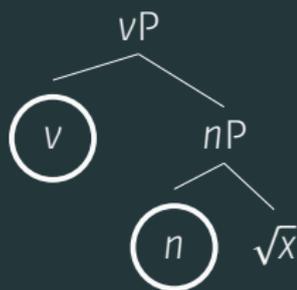
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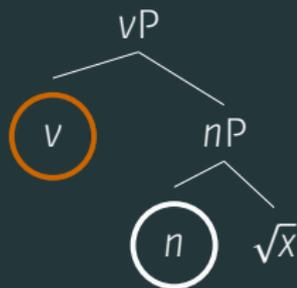
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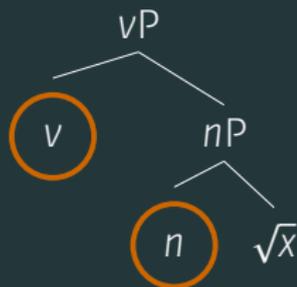
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# EVIDENCE FOR THE BICATEGORIAL STRUCTURE OF ADJECTIVES

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NOMINAL INTERIOR

## THE NOMINAL INTERIOR OF ADJECTIVES

- From '**below**', adjectives behave like nominals in that they show  $\varphi$ -agreement
  - It's an old grammatical tradition in IE to lump Adjectives with Nouns.
- adjectives behave like **nouns** by virtue of their  $\varphi$ -agreement (where applicable).
  - Prior to excorporation of  $v$ , the  $n$  is in c-commanding and Agreeable relation with the  $nP$  it modifies

- (1) dolg-∅ stol-∅  
long-M chair-M
- (2) dolg-a miz-a  
long-F chair-F
- (3) dolg-o pohištvo-o  
long-N furniture-N

• The adjectival *n* is **defective** in that it lacks [*iφ*]

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- What if we modify the modifier?

(4) **pretežn-o**/\*pretežen- $\emptyset$  dolg- $\emptyset$  stol- $\emptyset$   
 predominant-**ADV/M** long-**M** chair-**M**

(5) **pretežn-o**/\*pretežn-**a** dolg-**a** miz-**a**  
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(6) **pretežn-o**/\*pretežn-**o** dolg-**o** pohištvo-**o**  
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- What would prevent concord?

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  - PIC.
  - ∴ Categorisiers are phasers.

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VERBAL EXTERIOR

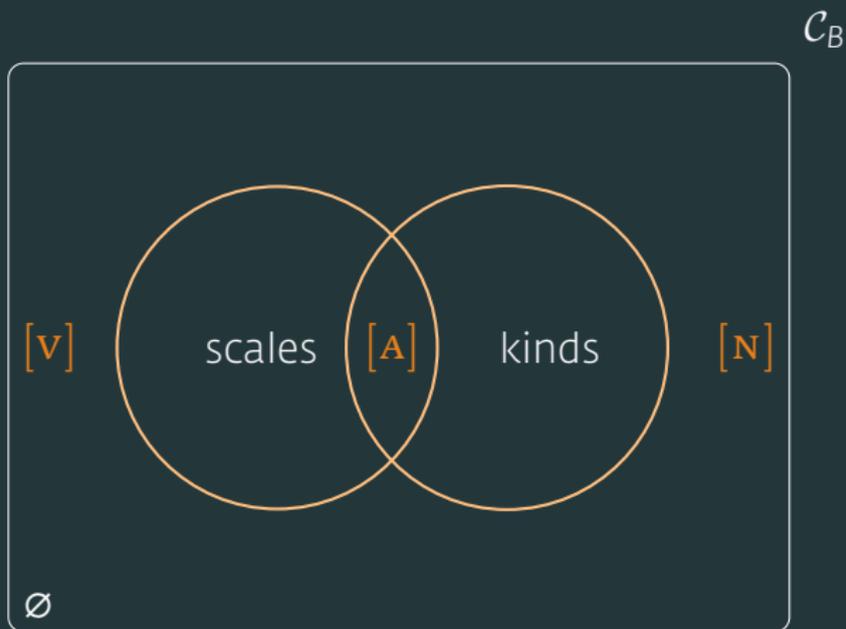
## THE VERBAL EXTERIOR OF ADJECTIVES

- From 'above', a modified Adjective has verbal behaviour, since modification of an Adjective requires selection by an adverbial element.
- This is also true in languages without gender, e.g., Hungarian.

(7) Hihetetlen-ül jó könyv  
incredib-ly good book  
'An incredibly good book'

- Additionally, this account is also compatible with the analysis that adverbs are copular in nature.
- Corver takes an A(djective)P to move to Spec(Cop(ula)P) which is headed by [<sub>Cop</sub> -ly] in prenominal adverbial structures.
- His empirical facts are derivable by virtue of a verbal presence in the proposed adjectival structure
  - ...his Cop is analogous to our (special adj.) v

- The 'extension-into-time' perspective on [v] can be relegated to a '**scalar**' sort. (Mitrović, 2017)
- Gradability is the core signature of adjectives.
- [Number : Nouns] :: [Time : Verbs] :: [**Degree : A**]



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THE WIDER TYPOLOGY: BEYOND ENGLISH

## A THREE-WAY TYPOLOGY

It's an established typological fact that there exists a **three-way system** of **adjectival encoding** across languages: the adjective behaves either

- I like a verb [V],
- II like a noun [N],
- III like both a verb and a noun [V,N].

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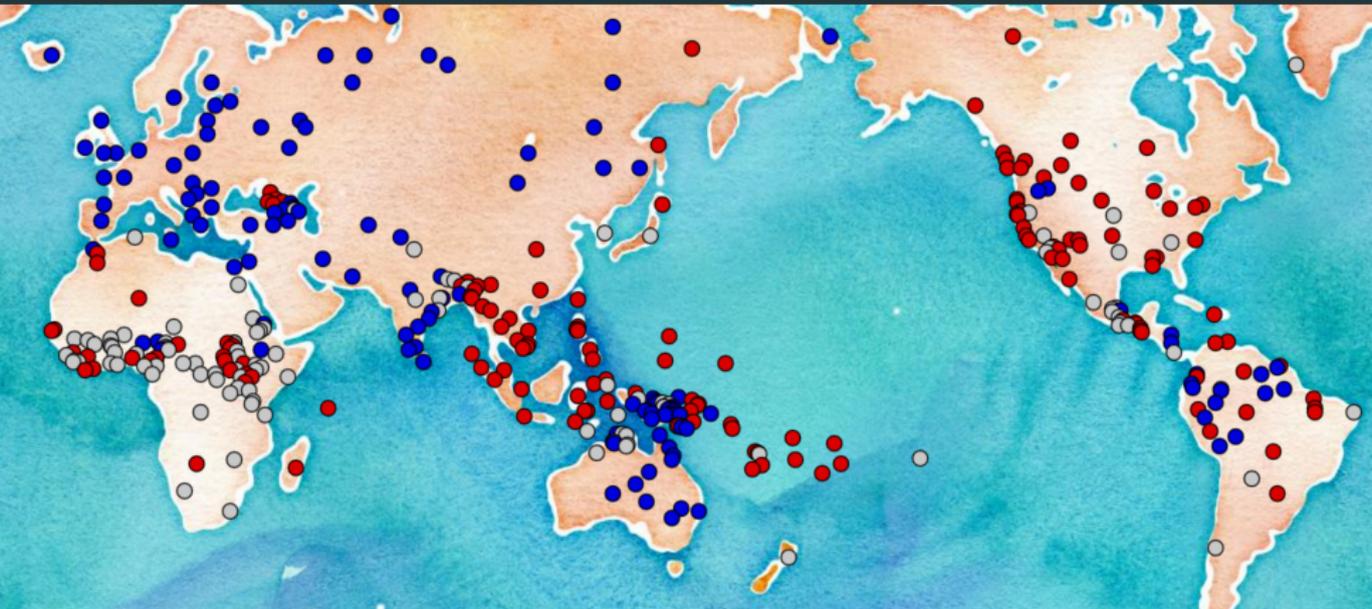
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- I like a **verb** [**V**],
- II like a **noun** [**N**], or else
- II like **both a verb and a noun** [**V,N**].

# ADJECTIVAL ENCODING



● Verbal

● Non-verbal (nom.)

● Mixed

---

Adjectives encoded **verbally** ● 39%

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Adjectives encoded **non-verbally** (nominally) ● 34%

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Adjectives encoded using a **mixed strategy**, i.e. **verbally and nominally** ● 27%

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# PARAMETRISATION

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- To construct the most exhaustive typological study of adjectives.
- If a language encodes adjectives verbally, how does it form comparatives?
- Towards a web of morpho-syntactic properties of adjectives ...

Some questions ...

- ① How is the adjectival category encoded?
- ② Does the Adjective show agreement?
- ③ Can the adjective stand on its own?
- ④ Is adjectival expression analogous to strategies involving genitives or relative clauses?
- ⑤ How are comparatives formed?

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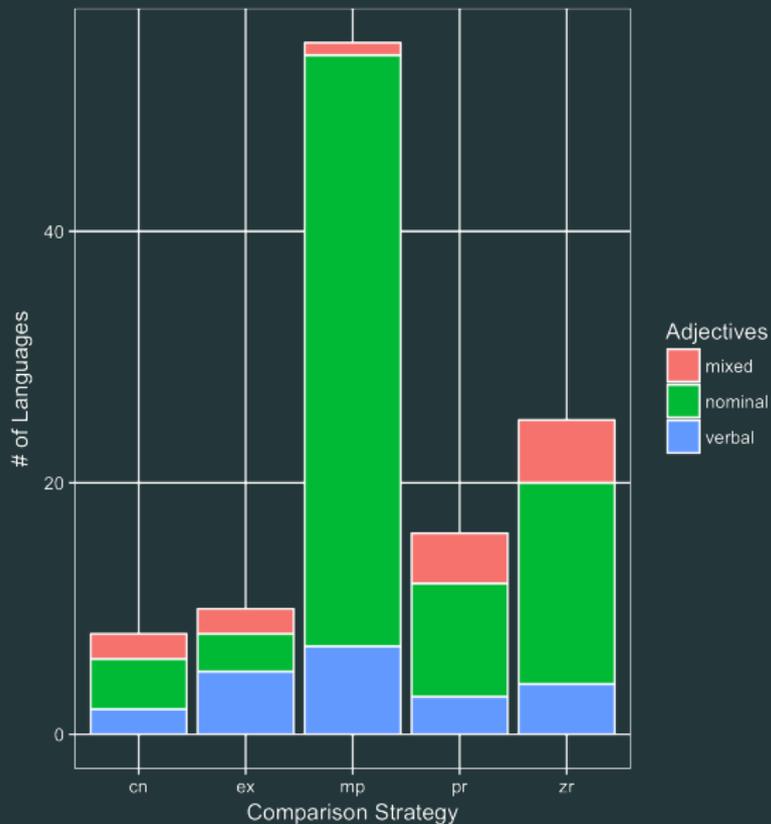
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- ⑤ **How are comparatives formed?**

- Five core strategies of forming comparatives: [B>G]
  - ① **Conjunction type**  
'Bill is tall **and** Gandalf is **not**'
  - ② **'Exceed'-type**  
'Bill **exceeds** Gandalf in tallness'
  - ③ **Morphological type**  
'Bill is **taller** than Gandalf.'
  - ④ **Periphrastic type**  
'Bill is **more** tall than Gandalf.'
  - ⑤ **Zero type**  
'Bill is **∅** tall, compared to Gandalf.'

## CATEGORIES & COMPARATIVES: FIRST RESULTS



- Is it a coincidence if you encode adjectives as nouns and employ morphological means of expressing comparatives?
- **No.**
  - $p < .0.0001$  ( $\chi^2 = 42.6336, df = 1$ )

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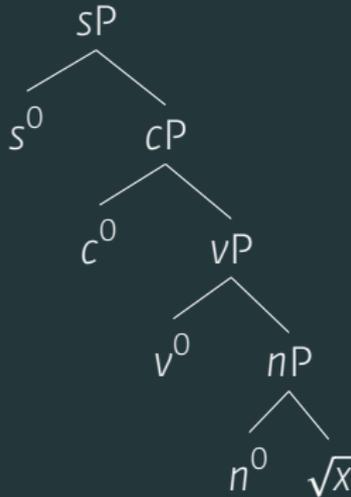
## PARAMETRISATION

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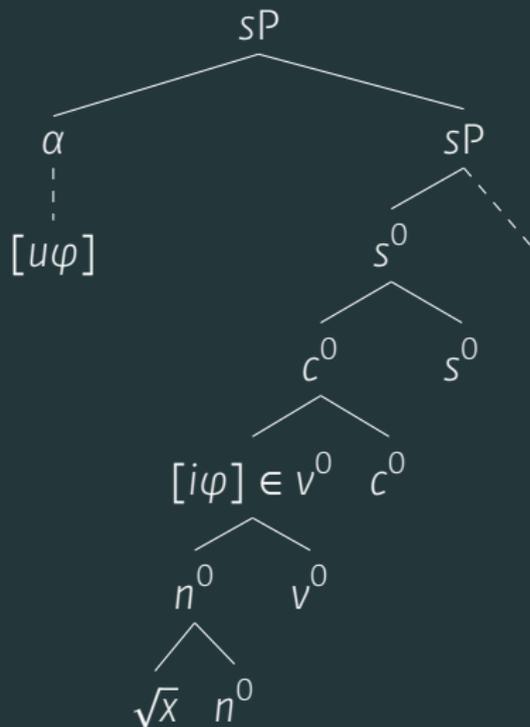
ANOTHER QUIRK: MODIFIED SUPERLATIVES

## WHY NO ADVERBIALY MODIFIED SUPERLATIVES?

- As per Bobaljik (2012), adjectives associate with an extended structure encoding comparatives ( $c^0$ ) and superlatives ( $s^0$ ).



- synthetic comparatives/superlatives arise from roll-up, or (successively consistent) incorporation.
- If  $\alpha$  is a modifier with  $[u\varphi]$ , then the edge should, *c. p.*, be accessible for such valuation.
- $\varphi$ -concord expected in adverbially modified synthetic superlatives.



- Adverbially modified synthetic superlatives.

(8) a. an incredibly strong government

b. an incredibly stable government

(9) a. an incredibly stronger government

b. an incredibly **more** stable government

(10) a. ? the incredibly strongest government

b. the incredibly **most** stable government

- This is also borne out in Modern Greek (✓ periphrastic superl. vs \*morphol. superl.).

## DISCUSSION AND CONCLUSION

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- Chomsky's theoretical take on adjectives has been implemented with less stipulation.
- Empirically founded account.
- Parsimony: a doubleton inventory of categorial features will do.

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- Foundational questions remain: what is the nature of categorisers in terms of compositional semantics?
  - First-phase semantic (cf. Noun class)
  - Morphosyntactic categorisation: Formal semantics vs. theory
- Why is the complex edge inaccessible in adverbially modified superlatives?
- Can **gradability** and the degree-semantic signature of adjectives fall out for free from the composition of *v* and *n*?
  - Hopefully

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**THANK YOU.**

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