UD_Gwichin-TueCL: Annotating an endangered polysynthetic Athabascan language in UD

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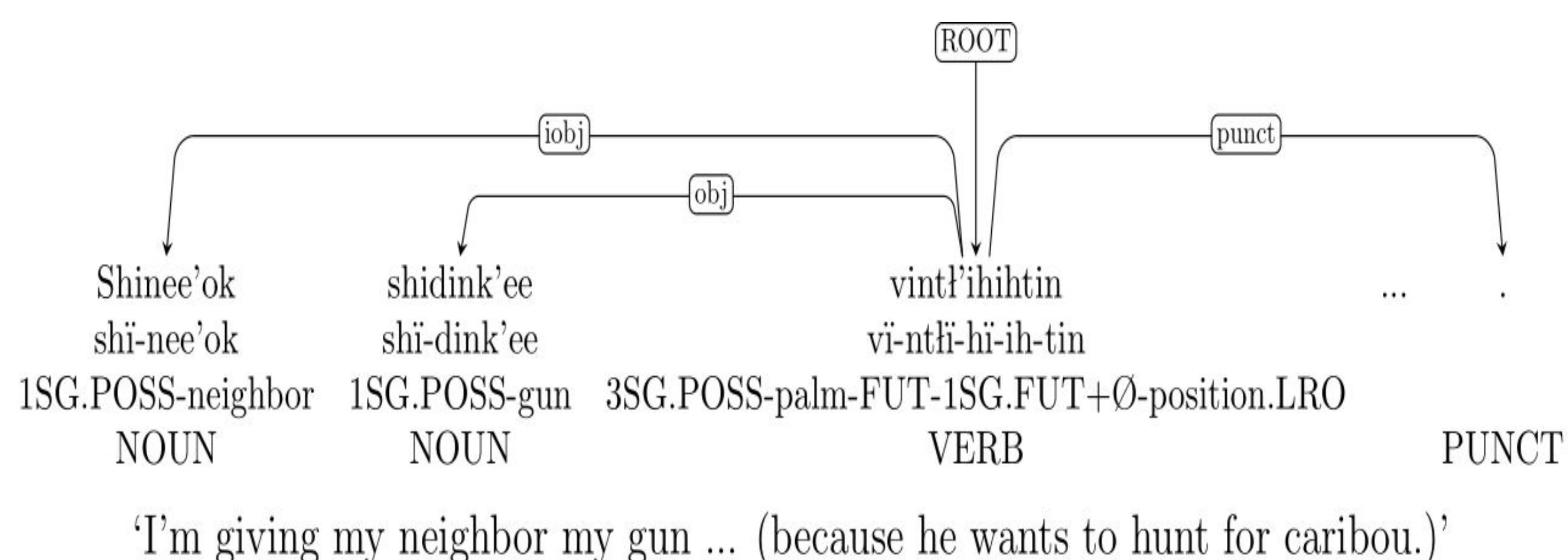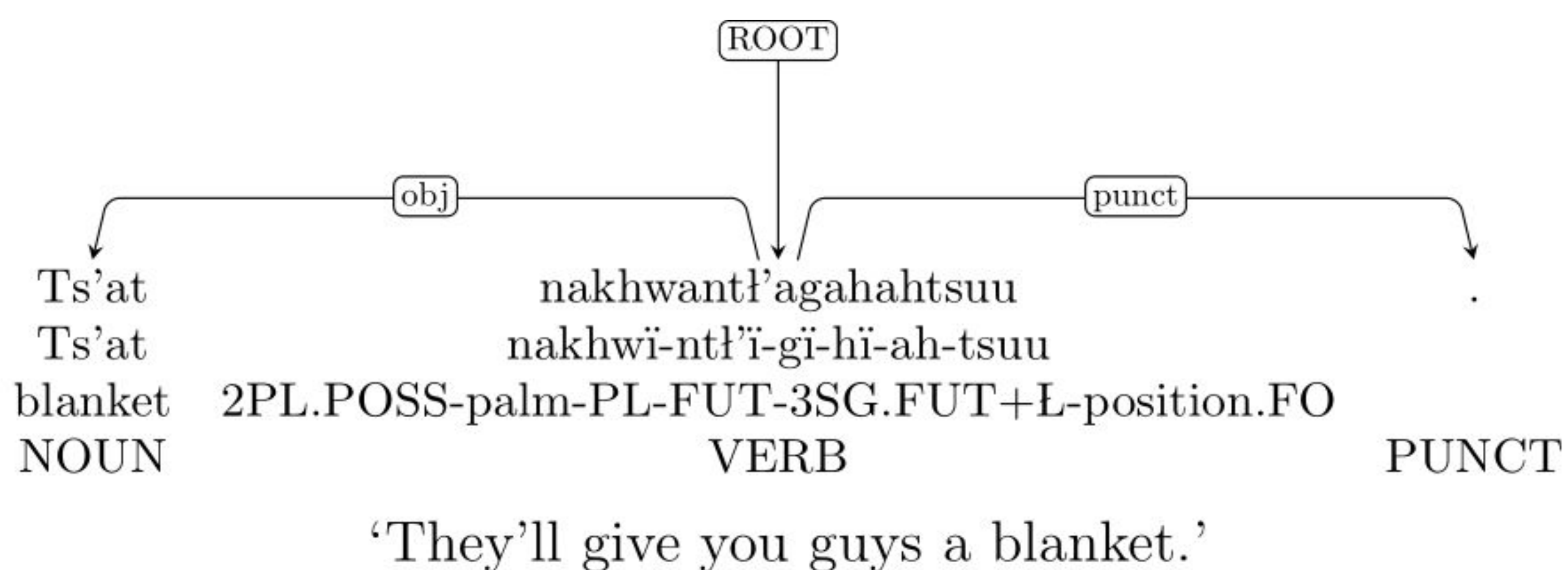University of Tübingen

Introduction

- Gwich'in is an Athabascan language spoken in Alaska and Canada
- 600 native speakers remain
- Classified as severely endangered (SE) by UNESCO
- Treebank focuses on the Alaskan variety
- Documentation and description is limited; sources from the Alaska Native Language Archive (ANLA)
- First treebank of (Northern) Athabascan language?

Interesting Language Features

- 4 verb classes called "Classifiers" (Ø, L, Ł, D)
- ~9 noun classes encoded on the verb stem, called "Classificatory verbs"
- Postpositional person inflection (human objects)
- Directionals encode three pieces of information (direction:9, orientation:4, distance:3; 9x4x3=~96 different direction terms)
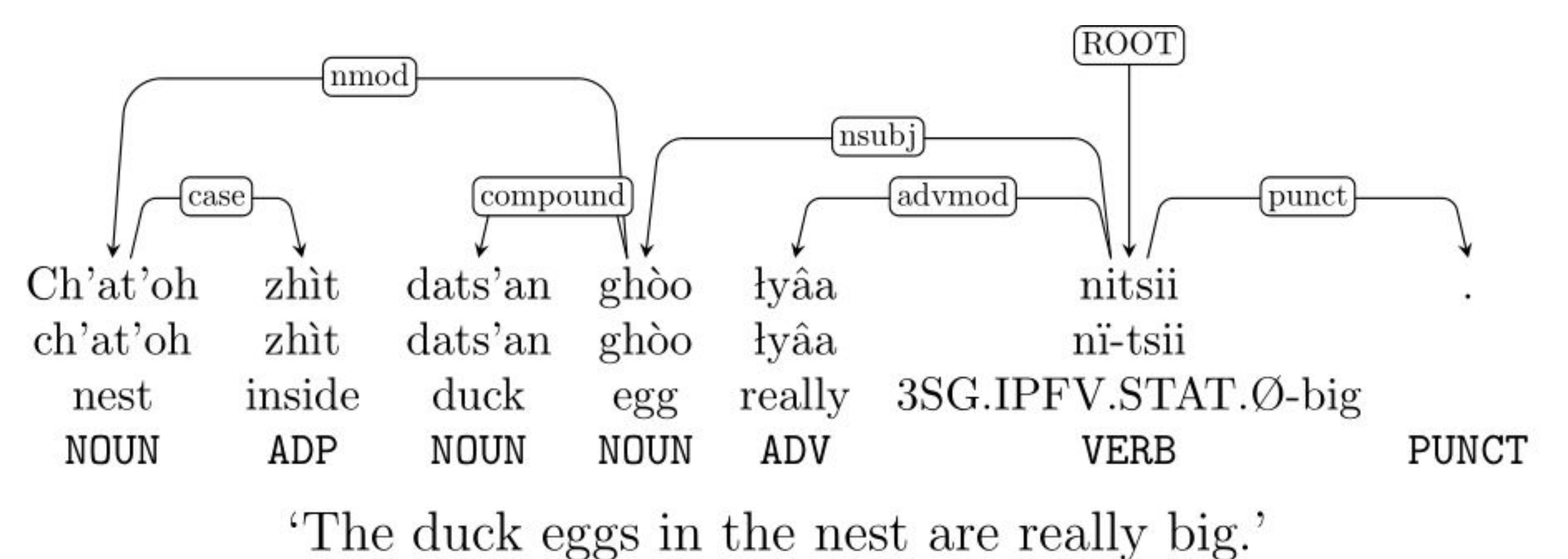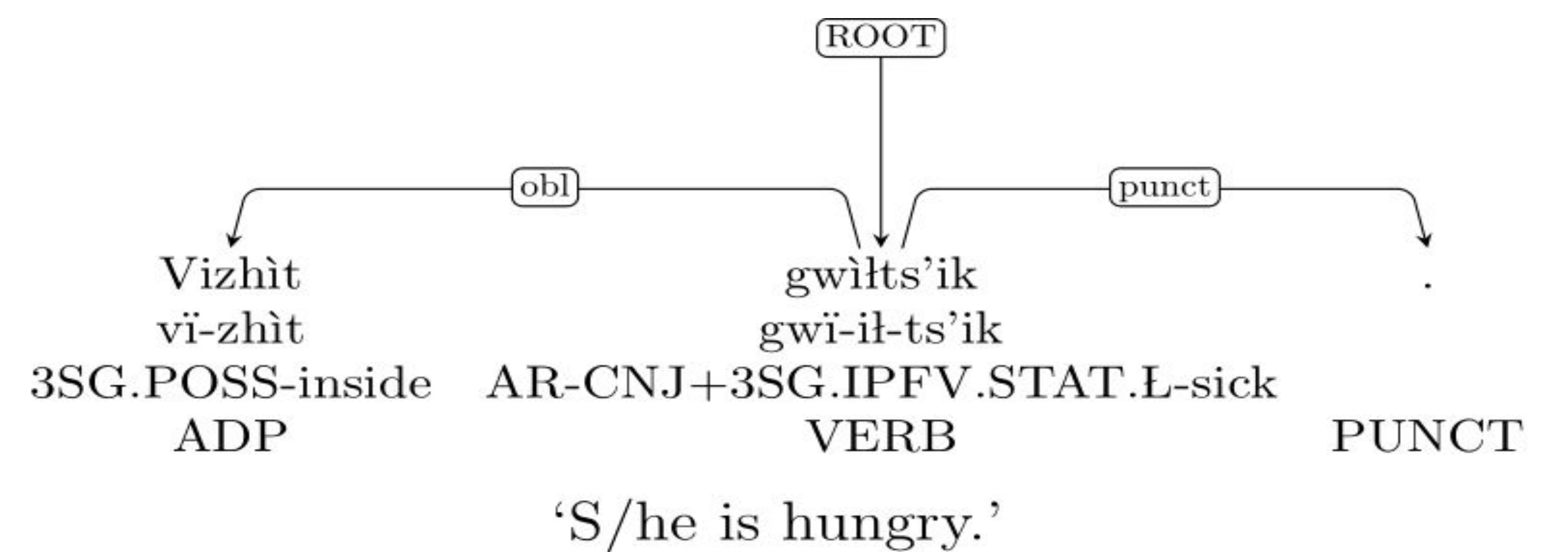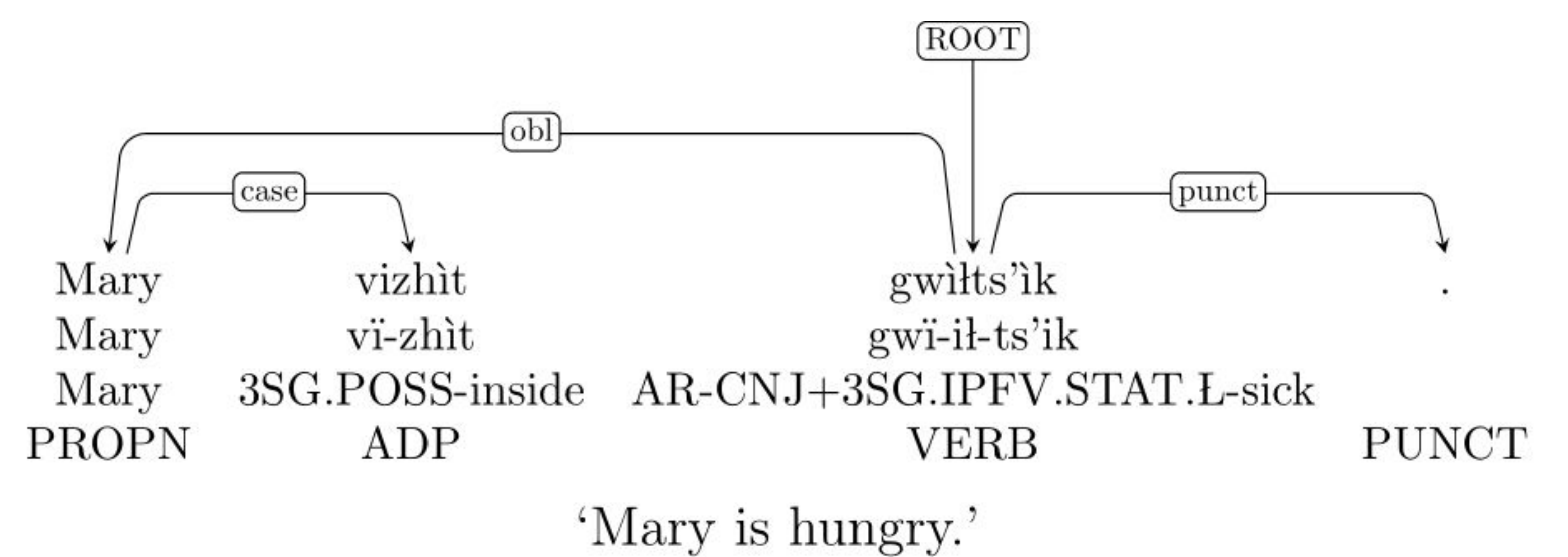
Classificatory verbs example

- In this example, 'give' is expressed in Gwich'in by 'positioning obj. in recipient's palm', but the verb stem and classifier are different depending on the noun class of the object (e.g., cloth-like (FO), stick-like (LRO), animate (AO), etc.

Ts'at	nakhwantł'agahahtsuu	.
Ts'at	nakhwï-ntł'ï-gï-hï-ah-tsuu	
blanket	2PL.POSS-palm-PL-FUT-3SG.FUT+L-position.FO	
NOUN	VERB	PUNCT

'They'll give you guys a blanket.'

Shinee'ok	shidink'ee	vintł'ihihtin	...	.
shï-nee'ok	shï-dink'ee	vï-ntłï-hï-ih-tin		
1SG.POSS-neighbor	1SG.POSS-gun	3SG.POSS-palm-FUT-1SG.FUT+Ø-position.LRO		
NOUN	NOUN	VERB		PUNCT

'I'm giving my neighbor my gun ... (because he wants to hunt for caribou.)'

Postposition Inflection

- Gwich'in postpositions must agree with their object.
- If the object is human, the postposition is inflected for person.
- If the object is non-human, there is no inflection.
- If the object is areal, the postposition requires the gwï- prefix.
- If the object is unspecified, the postposition takes the 3rd person object prefix.

Mary	vizhìt	gwìłts'ik	.
Mary	vï-zhìt	gwï-ił-ts'ik	
Mary	3SG.POSS-inside	AR-CNJ+3SG.IPFV.STAT.Ł-sick	
PROPN	ADP	VERB	PUNCT

'Mary is hungry.'

Vizhìt	gwìłts'ik	.
vï-zhìt	gwï-ił-ts'ik	
3SG.POSS-inside	AR-CNJ+3SG.IPFV.STAT.Ł-sick	
ADP	VERB	PUNCT

'S/he is hungry.'

Ch'at'oh	zhìt	dats'an	ghòo	łyâa	nitsii	.
ch'at'oh	zhìt	dats'an	ghòo	łyâa	nï-tsii	
nest	inside	duck	egg	really	3SG.IPFV.STAT.Ø-big	
NOUN	ADP	NOUN	NOUN	ADV	VERB	PUNCT

'The duck eggs in the nest are really big.'

What's the lemma?

- *Ch'ąąhtsii* means 'She is picking berries'
- This verb has stem -*tsii* and takes classifier Ł subject prefixes (eg., *ah-* for 3SG)
- Notice that 'big' also has verb stem -*tsii*, but takes classifier Ø subject prefixes (e.g., *nï-* for 3SG)
- In the sentence 'She picked berries', the verb stem changes to -*tsąįį* and takes the perfective subject prefixes for the Ł classifier = *Ch'įįłtsąįį*