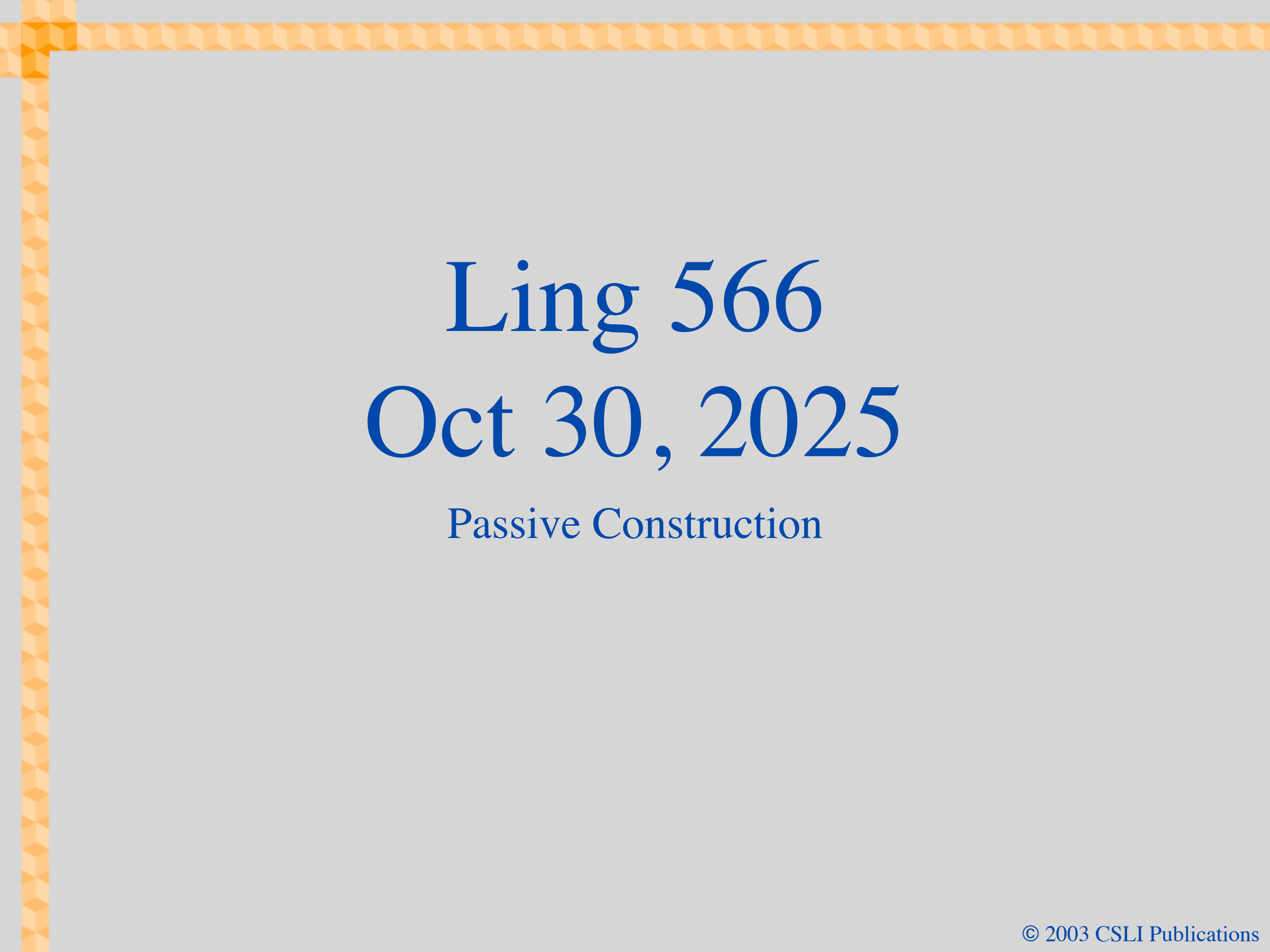


A decorative border in the top-left corner of the slide, composed of a grid of small, 3D-looking orange cubes or diamonds.

Ling 566

Oct 30, 2025

Passive Construction

Don't forget to vote!

- WA allows same day voter registration
- <https://cele.uw.edu/students/huskies-vote/register-to-vote/>

Overview

- Passive
 - Arguments for lexicalist account
 - Details of our analysis
- Reading Questions

The Passive in Transformational Grammar

- Passive was the paradigmatic transformation in early TG.
- Motivations
 - Near paraphrase of active/passive pairs.
 - Simplified statement of cooccurrence restrictions.
 - E.g. *devour* must be followed by an NP, *put* by NP-PP
 - Such restrictions refer to pre-transformational (“deep”) structure.
 - Intuition that active forms were more basic, in some sense.
- Its formulation was complex:
 - Promote object
 - Demote subject, inserting *by*
 - Insert appropriate form of *be*, changing main verb to a participle.

But transforming whole sentences is overkill

- Passive sentences look an awful lot like some actives:

The cat was chased by the dog vs

The cat was lying about the dog

- Passives occur without *be* and without the *by* phrase:

Cats chased by dogs usually get away.

My cat was attacked.

So a lexical analysis seems called for

- What really changes are the verb's form and its cooccurrence restrictions (that is, its valence).
- There are lexical exceptions
 - Negative:
Pat resembles Bo but **Bo is resembled by Pat*
That look suits you but **You are suited by that look*
 - Positive
Chris is rumored to be a spy but
**They rumor Chris to be a spy*

We posit a lexical rule

- Why not just list passive participles individually?
 - To avoid redundancy
 - To capture productivity (for example?)
- We make it a derivational (lexeme-to-lexeme) rule.
Why?
 - Our constraints on lexeme-to-word rules wouldn't allow us to make Passive one.



Newly coined verbs that the Passive Lexical Rule can apply to



Nobody has responded yet.

Hang tight! Responses are coming in.



When was the first fax machine invented?



1843

0

1880

0

1924

0

1948

0



When was the verb fax first attested, per the OED?



1869

0

1899

0

1949

0

1979

0

The Passive Lexical Rule

$$\left[\begin{array}{l} d\text{-rule} \\ \text{INPUT} \left\langle \boxed{1}, \left[\begin{array}{l} tv\text{-}lxm \\ \text{ARG-ST} \quad \langle [\text{INDEX } i] \rangle \oplus \boxed{A} \end{array} \right] \right\rangle \\ \text{OUTPUT} \left\langle F_{PSP}(\boxed{1}), \left[\begin{array}{l} part\text{-}lxm \\ \text{SYN} \quad \left[\text{HEAD} \quad [\text{FORM } \text{pass}] \right] \\ \text{ARG-ST} \quad \boxed{A} \oplus \left\langle \left(\begin{array}{c} \text{PP} \\ \left[\begin{array}{l} \text{FORM} \quad \text{by} \\ \text{INDEX} \quad i \end{array} \right] \end{array} \right) \right\rangle \end{array} \right] \right\rangle \end{array} \right]$$

Questions About the Passive Rule

$$\left[\begin{array}{l} d\text{-rule} \\ \text{INPUT} \quad \left\langle \boxed{1}, \left[\begin{array}{l} tv\text{-}lxm \\ \text{ARG-ST} \quad \langle [\text{INDEX } i] \rangle \oplus \boxed{A} \end{array} \right] \right\rangle \\ \text{OUTPUT} \quad \left\langle F_{PSP}(\boxed{1}), \left[\begin{array}{l} part\text{-}lxm \\ \text{SYN} \quad \left[\text{HEAD} \quad [\text{FORM } pass] \right] \\ \text{ARG-ST} \quad \boxed{A} \oplus \left\langle \left(\begin{array}{c} PP \\ \left[\begin{array}{l} \text{FORM} \quad by \\ \text{INDEX} \quad i \end{array} \right] \end{array} \right) \right\rangle \end{array} \right] \right\rangle \end{array} \right]$$

- Why is the morphological function F_{PSP} ?
- Why do we have a separate FORM value pass? Why not say the output is [FORM psp]?
- What kind of a PP is the *by*-phrase (that is, argument-marking or predicationaional)?

More Questions

$$\left[\begin{array}{l} d\text{-rule} \\ \text{INPUT} \quad \left\langle \boxed{1}, \left[\begin{array}{l} tv\text{-lxm} \\ \text{ARG-ST} \quad \langle [\text{INDEX } i] \rangle \oplus \boxed{A} \end{array} \right] \right\rangle \\ \text{OUTPUT} \quad \left\langle F_{PSP}(\boxed{1}), \left[\begin{array}{l} part\text{-lxm} \\ \text{SYN} \quad \left[\text{HEAD} \quad [\text{FORM} \quad \text{pass}] \right] \\ \text{ARG-ST} \quad \boxed{A} \oplus \left\langle \left(\begin{array}{c} \text{PP} \\ \left[\begin{array}{l} \text{FORM} \quad \text{by} \\ \text{INDEX} \quad i \end{array} \right] \end{array} \right) \right\rangle \end{array} \right] \right\rangle \end{array} \right]$$

- What makes the object turn into the subject?
- Why is the type of the input *tv-lxm*?
- What would happen if it were just *verb-lxm*?
- Why is this a *d-rule*?

Intransitives have passives in German

In der Küche wird nicht getanzt.

in the kitchen is not danced

‘There is no dancing in the kitchen.’

NB: The exact analysis for such examples is debatable, but German, like many other languages, allows passives of intransitives, as would be allowed by our analysis if the input type in the Passive LR is *verb-lxm*.

Passive Input & Output

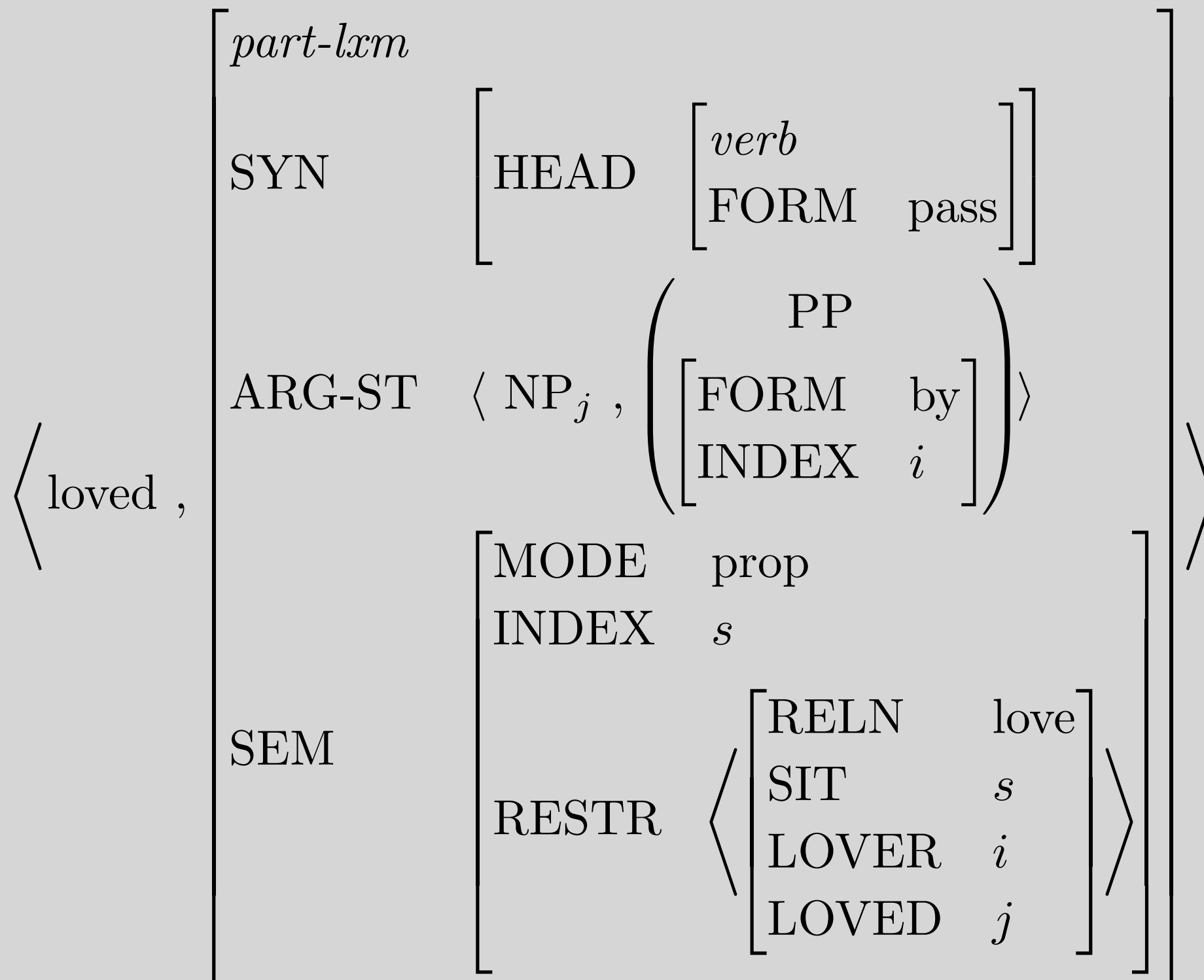
If you have one of these....

$$\left\langle \text{love} , \left[\begin{array}{l} \text{stv-lxm} \\ \text{ARG-ST} \quad \langle \text{NP}_i , \text{Y}_j \rangle \\ \text{SEM} \quad \left[\begin{array}{l} \text{INDEX} \quad s \\ \text{RESTR} \quad \left\langle \left[\begin{array}{ll} \text{RELN} & \text{love} \\ \text{SIT} & s \\ \text{LOVER} & i \\ \text{LOVED} & j \end{array} \right] \right\rangle \end{array} \right] \end{array} \right] \right\rangle$$

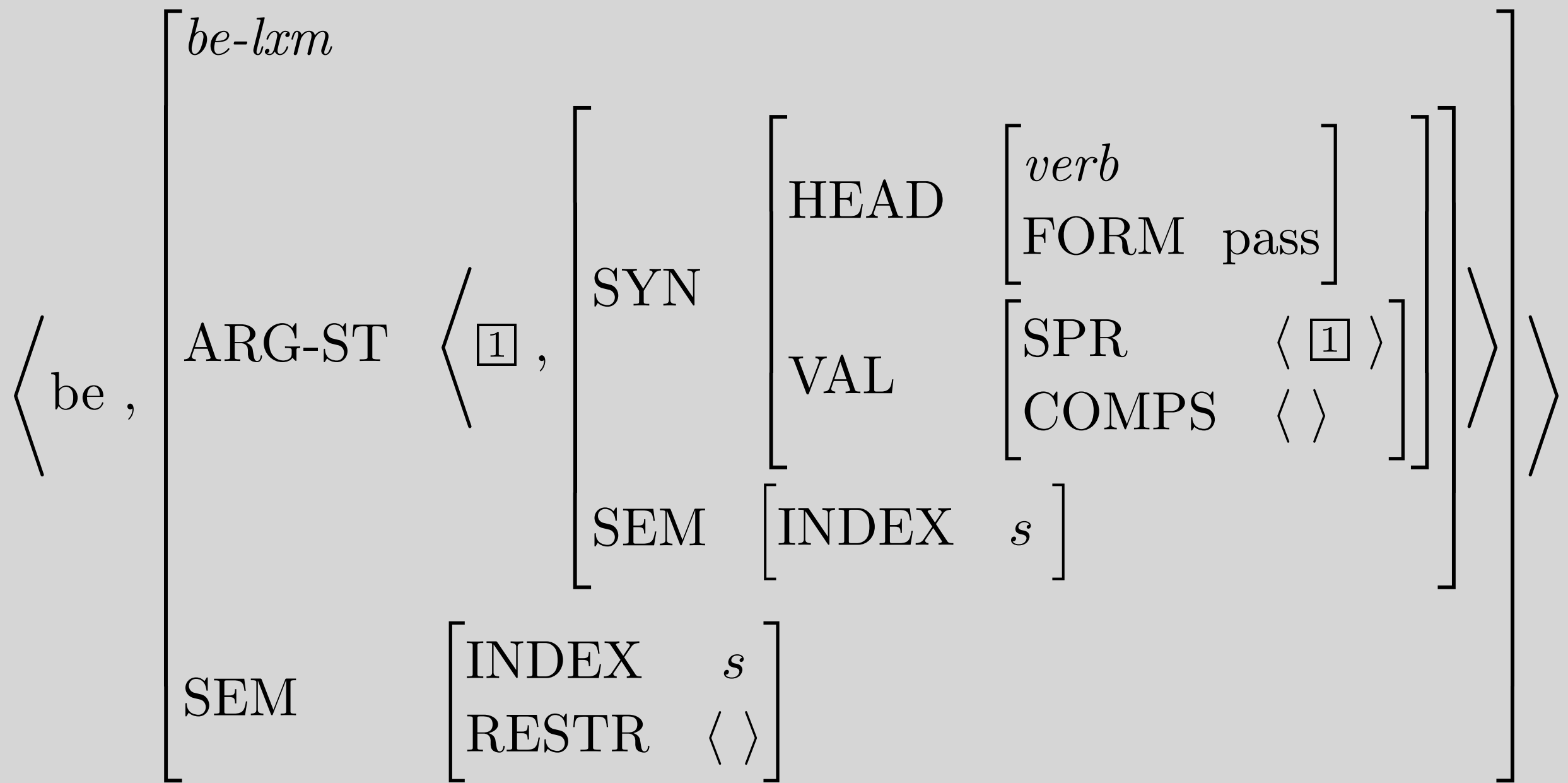
Then you also get one of these....

$$\left\langle \text{loved} , \left[\begin{array}{l} \text{part-lxm} \\ \text{SYN} \quad \left[\text{HEAD} \quad \left[\text{FORM} \quad \text{pass} \right] \right] \\ \text{ARG-ST} \quad \langle \text{Y}_j , \left(\begin{array}{c} \text{PP} \\ \left[\begin{array}{ll} \text{FORM} & \text{by} \\ \text{INDEX} & i \end{array} \right] \end{array} \right) \rangle \\ \text{SEM} \quad \left[\begin{array}{l} \text{INDEX} \quad s \\ \text{RESTR} \quad \left\langle \left[\begin{array}{ll} \text{RELN} & \text{love} \\ \text{SIT} & s \\ \text{LOVER} & i \\ \text{LOVED} & j \end{array} \right] \right\rangle \end{array} \right] \end{array} \right] \right\rangle$$

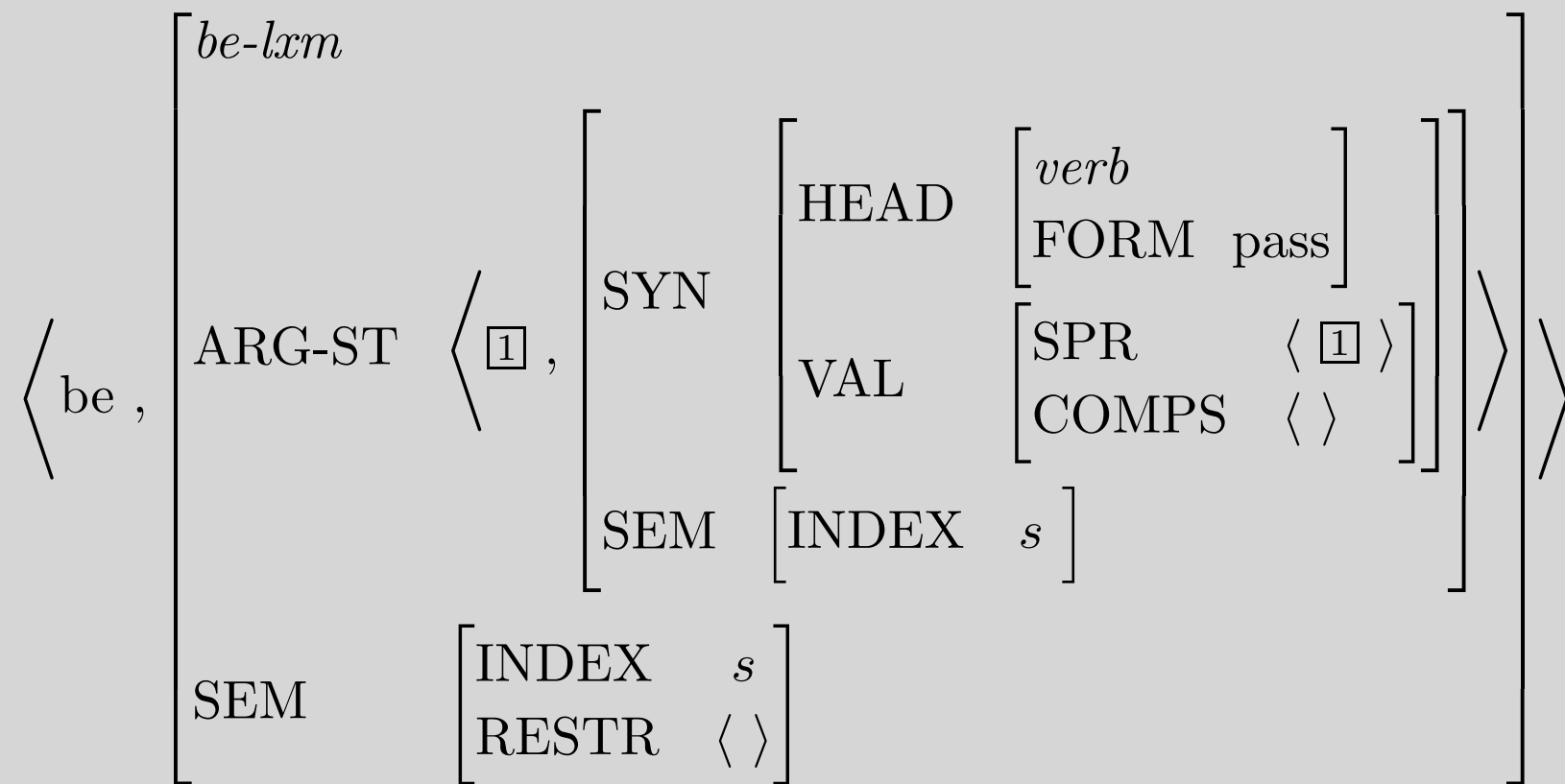
In a bit more detail...



The *be* that Occurs with Most Passives



Questions About the Entry for *be*



- Why doesn't it include valence features?
- What is the category of its complement (i.e. its 2nd argument)?
- What is its contribution to the semantics of the sentences it appears in?
- Why is the first argument tagged as identical to the second argument's SPR value?

Passive tree

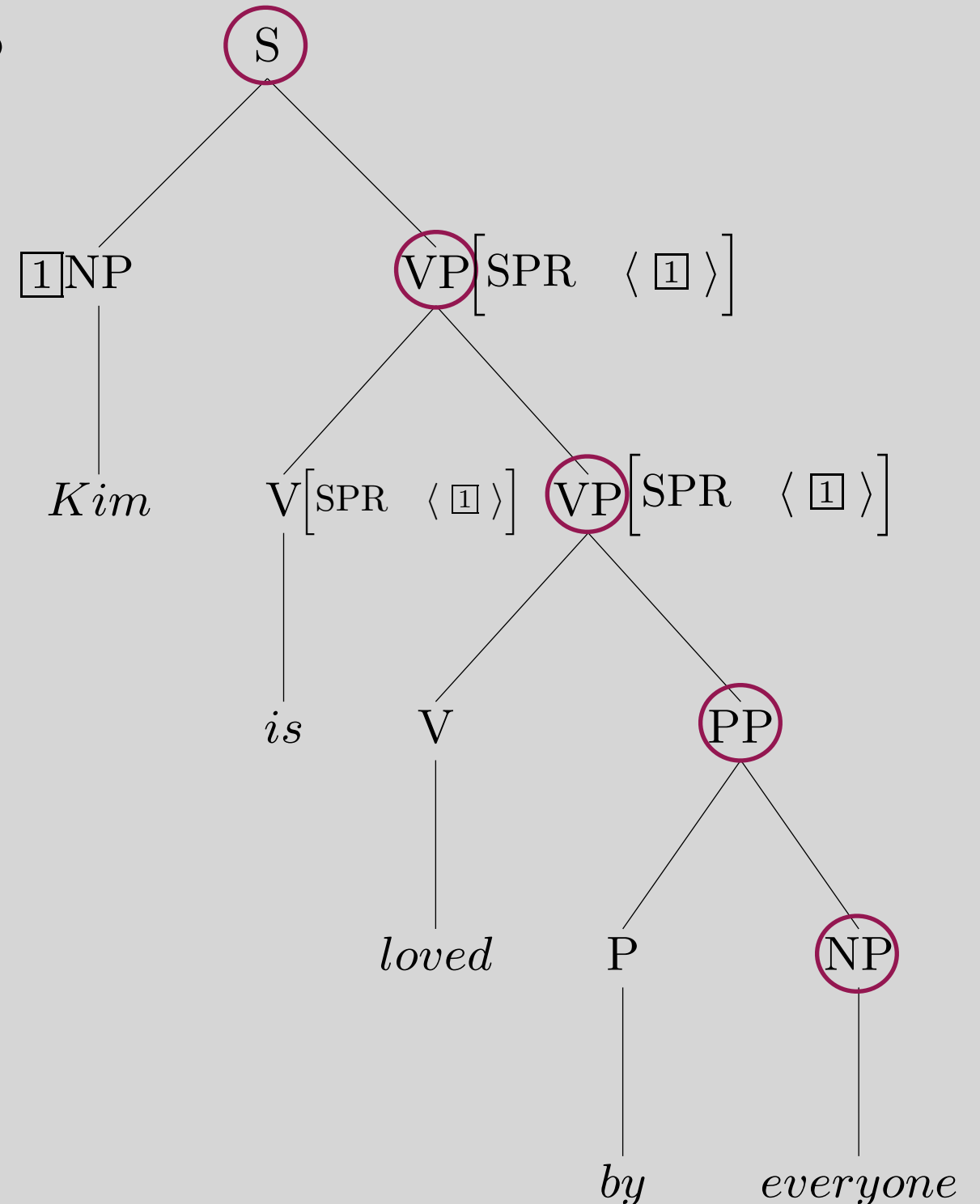
Which rule licenses each node?

What is the SPR value of the upper VP?

What is the SPR value of the lower VP?

What is the SPR value of *is*?

Any questions?





The verb be just does away with the SPR of it complement and I think that's:



Sneaky!

0

Unfair! The verb needed that SPR!

0

Confusing! How can a requirement just go away?

0

Subtle! I can see it works, but it's still surprising

0

Elegant!

0

More Questions

- Why do we get
They are noticed by everyone
and not
**Them are noticed by everyone?*
- Why don't we get
**They is noticed by everyone?*
- What would facts like these entail for a transformational analysis?

Overview

- Passive
 - Arguments for lexicalist account
 - Details of our analysis
- Reading Questions
- Ch 9 leftover Reading Questions

RQs: Imperative

- The way that the Passive Lexical Rule is said to operate on ARG-ST makes me wonder how to best model ARG-ST for imperatives: shouldn't there be an implied “you” somewhere on the ARG-ST list for imperative sentences?
- Furthermore, why does it make sense to have a Passive Lexical Rule but an Imperative (~~word~~ phrase structure) Rule?

RQs: d-rules v. transformations

- I get that the chapter treats the passive as a lexical rule instead of a syntactic transformation, but I'm still trying to wrap my head around how that works in practice. If the passive is really just a change in the verb's argument structure, wouldn't that suggest some syntactic process is still happening?

RQs: Ordering

- In our grammar is there a way we know for sure the order of which to apply rules, like the Passive Lexical Rule followed by the Constant Lexeme Lexical Rule and not the other way around?
- In chapter 8 and 9 we formulated lexical rules as l-rules so that we could put them in a type hierarchy, does the hierarchy have anything to do with the rule application order?
- In the lexical entry for *be*, what part determines the order of subject-auxiliary-VP when the VP's SPR includes the subject but doesn't include the auxiliary?

RQs: FORM

- What does FORM fin mean? Page 322, does the FORM fin refer to past-tense semantics and a third-person singular?
- I see now we can use FORM to pin down specific prepositions. Does that also account for the cases where several prepositions are synonymous like *by* vs. *through*, multi-word Ps like *by means of*, or languages where the agent marker is a case rather than a P?

RQs: FORM

- "The specification [FORM by] on this PP indicates that the PP must be headed by the preposition by." Can the value of FORM for PPs be assumed to always be the preposition itself? Or is there another notation for any valid PP (perhaps not stipulating one at all, just "PP" vs. "PP[by]"? In the case of two valid PP choices, such as rely on/upon, would that be notated as PP[on | upon]?

RQs: CASE

- I'm still wondering why case isn't used in the passive construction. Since the focus in a passive sentence is on the object or the action, wouldn't it make sense to use the objective case?

RQs: SHAC/AGR

- Is it necessary to show specifier agreement on a past-tense (non-be) verb, even though past tense verbs do not have agreement in English, theoretically allowing this to be underspecified?

RQs: Semantics of dropped arguments

- In (19), how can LOVER in the RELN love be assigned to index *i* when the PP that identifies *i* is optional? If the PP is not there (ex. I was loved), who would be the lover? It's unspecified?

RQs: Specific constructions

- All of the grammar rules posited apply to a broad range of situations--anything involving phrases--while rule 5 only applies to imperative phrases, which to me seems to stick out like a sore thumb. Does this imperative rule have any siblings--other rules which only apply to a subset of English sentences?

RQs: Principles as type constraints

- What is the practical boundary between rules (phrasal/lexical) and principles (global constraints) in our HPSG so far, and could some principles be re-cast as type-level constraints that rules merely instantiate? How does this choice affect learnability and ambiguity resolution?
- Where did the principles go, actually, in Ch 9?

Practice tree

- Kim's and Sandy's friend arrived

