Overview

• Model v. modeling domain and constructing arguments

• Technical details (lexical entries, trees)

• Cascades of identities in Wambaya

• Analogies to other systems you might know

• Your questions...

• Problems 6.4 and 6.5
Ambiguity

• Are these sentences ambiguous?

The swan and the duck in the river swam together.

Kim slept and Dana wrote at the same time.
What’s wrong with this?

- Because the PP can modify both Ss in (1), PPs must be able to modify S.

(1) Kim danced and Sandy sang on Saturday
(Icelandic) Case

- Should CASE be inside AGR? Why or why not?
- To what extent is Icelandic case marking semantically driven?
- How do you know?
Constructing an argument

• Different Icelandic verbs appear with subjects in different cases.

• In a model where case is assigned by phrase structure position...

• In a model where case is constrained on the valence features of verbs...

• In conclusion...
AGR and determiners

- What should the PER value be on lexical entries for *this, these, those, the, ...*?
What’s wrong with this?

\[
\langle \text{this} , \begin{bmatrix}
\text{HEAD} \\
\text{VAL}
\end{bmatrix}
\begin{bmatrix}
de t \\
\text{AGR} \\
\text{SPR} \\
\text{COMPS}
\end{bmatrix}
\begin{bmatrix}
\text{NUM} \\
\text{str}
\end{bmatrix}
\rangle
\]

NB: Ch 3 grammar
How about this?

\[
\langle \text{this}, \begin{bmatrix}
\text{HEAD} \\
\text{VAL}
\end{bmatrix}
\begin{bmatrix}
\text{det} \\
\text{AGR} \\
\text{val-cat} \\
\text{SPR} \\
\text{COMPS}
\end{bmatrix}
\begin{bmatrix}
\text{AGR} \\
\text{NUM} \\
\text{sg}
\end{bmatrix}
\rangle
\]
Or this?

\[
\langle \text{this} , \begin{bmatrix}
\text{HEAD} \\
\text{VAL}
\end{bmatrix}
\begin{bmatrix}
\text{det} \\
\text{AGR} \ [1] \\
\text{SPR} \langle \rangle \\
\text{COMPS} \langle \rangle
\end{bmatrix}
\rangle
\]

\[
\langle \text{cat} , \begin{bmatrix}
\text{HEAD} \\
\text{VAL}
\end{bmatrix}
\begin{bmatrix}
\text{noun} \\
\text{AGR} \ [1] \text{3sing} \\
\text{SPR} \langle D \rangle \\
\text{COMPS} \langle \rangle
\end{bmatrix}
\rangle
\]
SPR value on AP/PP?

• Kim grew fond of baseball.
• Kim and Sandy ate lunch in the park.
• Kim and Sandy are in the park.
COMPS on PP?

• Kim put the books here.
• Here, have a cookie.
• Kim put the books here have a cookie.
• Kim put the books on the table.
Which grammar does this tree go with?

```
NP
   /   \
  D    NOM
 /     /   
the  N  cat
```
Tags & lists

• What’s the difference between these two?

\[
\begin{align*}
[SPR \ 1\langle NP \rangle] \\
[SPR \ \langle 1NP \rangle]
\end{align*}
\]

• When does it matter?
What’s wrong with this tree?

```
The NP

[D

the

N

COMPS ⟨ (1PP) ⟩

1PP

photos

of the suspect]
```
Information passing in Wambaya

[Diagram of a syntactic tree with nodes labeled with transformations and case markers, illustrating the structure of information passing in Wambaya.]

1. Initial NP: [CASE erg]
2. Initial D: [CASE erg]
3. Initial VP: [SPR ⟨[CASE erg]⟩]
4. Initial N: [CASE abs]

The diagram shows the syntactic structure and the transformation rules involved in the passage of information within the Wambaya language.
What requires this identity?
How about this one?
Is this tree really valid for Wambaya?
Type hierarchy analogies

- How is this formalism like OOP?
- How is it different?
- How is the type hierarchy like an ontology?
- How is it different?
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