Core Arguments in Universal Dependencies

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Overview

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- Subject, object $\Rightarrow$? core argument
  - Traditional grammar: argument $\Leftrightarrow$ object or subject
  - UD: core argument $\Rightarrow$ object or subject
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  - Subject, object $\Rightarrow$? core argument
    - Traditional grammar: argument $\Leftrightarrow$ object or subject
    - UD: **core** argument $\Rightarrow$ object or subject
- Coding strategies
  - Word order (left of predicate, right of predicate)
  - Case morphology (Nom, Acc, Dat, Gen, Abl, Ins, Loc, Voc)
  - Adposition (+ case)
Coding Strategies

- English: bare NP vs. preposition
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- Indo-European case-marking languages
  - Baltic, Slavic
  - German, Greek
  - Gothic, Latin, Ancient Greek, Sanskrit
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- Nominative $\Rightarrow$ typical subject
- bare Accusative $\Rightarrow$ typical object (but can be adjunct)
- bare Dative $\Rightarrow$ often object or indirect object, can be adjunct
- bare Genitive $\Rightarrow$ often object or counted/partitive subject
- bare Instrumental $\Rightarrow$ object or oblique agent or adjunct
- bare Ablative, Locative $\Rightarrow$ adjunct or object
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- bare Ablative, Locative $\Rightarrow$ adjunct or object
- preposition with any case $\Rightarrow$ adjunct or object
Conclusion

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- Arguments vs. adjuncts distinction cannot be avoided
- Bare non-accusatives: proposed as part of core
- Oblique arguments = prepositional objects: obl:arg
  - Sensitive to traditional terminology
- Indirect object: questionable benefit
  - Only for two-obj predicates, only if the other is “better”
  - OR: all non-accusative objects (whether or not double-obj)
  - OR: make language-specific
Thank You!
Questions?
Come to the Poster!
Primary Transitive Predicates

```
root
    ^  ^
   /  /
  nsubj  obj
  Jiří  zabil  draka
  Case=Nom   Case=Acc
  George    killed    dragon
```

George killed the dragon.
Secondary Transitive Predicates

\[
\text{root} \rightarrow \text{nsubj} \rightarrow \text{Jiří, Case=Nom, George} \leftarrow \text{obj} \rightarrow \text{miluje, loves, Marii, Case=Acc, Mary}
\]
Adjunct with “Core Coding”

Jiří pracuje celý den
George works whole day

Case=Nom, Case=Acc, Case=Acc
“Transitives” with Bare Dative

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What is Indirect Object?

Král dal Jiřímu zlato
King gave George gold
Case=Nom Case=Dat Case=Acc
Two Accusatives

Karel
Case=Nom
Charles
nsubj
Karel
Case=Nom
Charles
nsubj

učí
Case=Acc
teaches
obj
učí
Case=Acc
teaches
obj

Jiřího
Case=Acc
George
obj
Jiřího
Case=Acc
George
obj

etiketu
Case=Acc
etiquette
root
etiketu
Case=Acc
etiquette
root