
A Comparative Introduction to XDG: Semantics

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Representing semantics

- *Von jedem Mann wird eine Frau geliebt.*
- semantics (weak reading):
 $\forall x.man(x) \rightarrow \exists y.woman(y) \wedge love(x, y)$
- two dimensions:
 - predicate-argument structure
 - scope structure (derivation tree)

Predicate-argument dimension

$$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$$

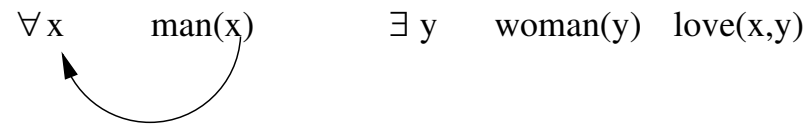
Predicate-argument dimension

$$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$$

$$\forall x \text{ man}(x) \quad \exists y \text{ woman}(y) \text{ love}(x,y)$$

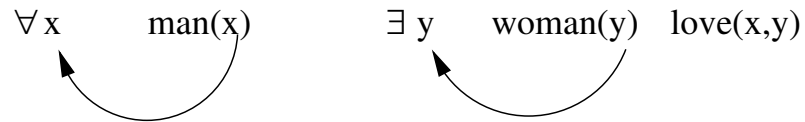
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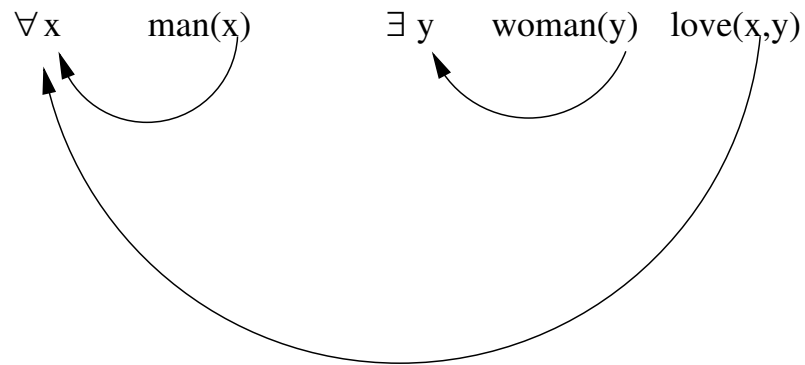
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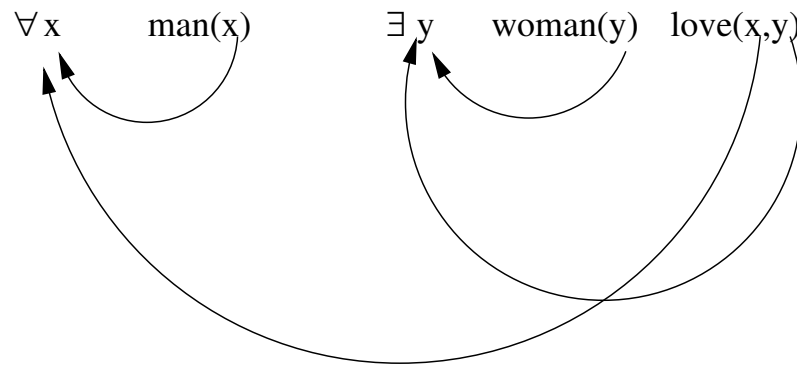
Predicate-argument dimension

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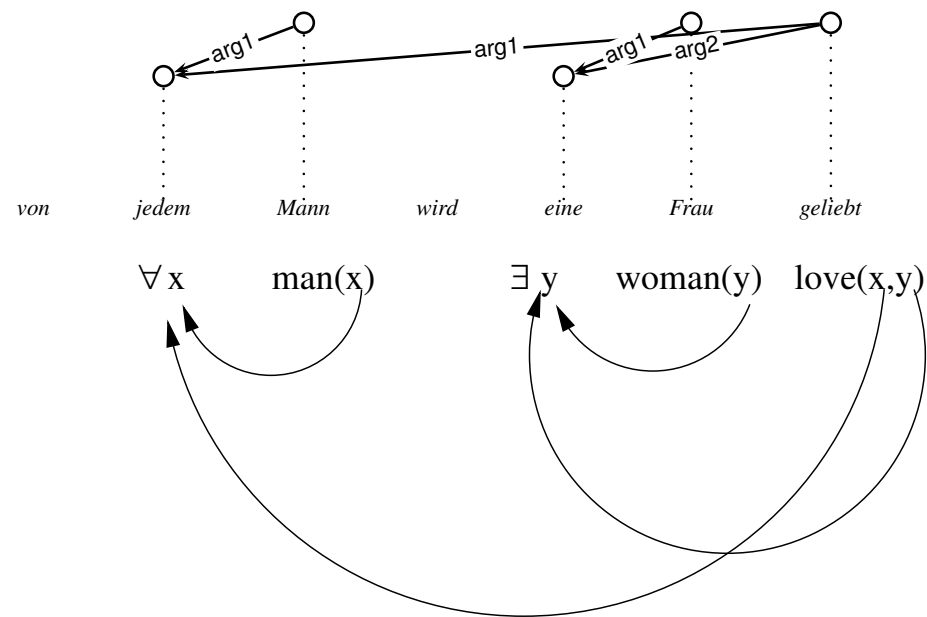
Predicate-argument dimension

$$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$$



Predicate-argument dimension

$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$



Scope dimension

$$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$$

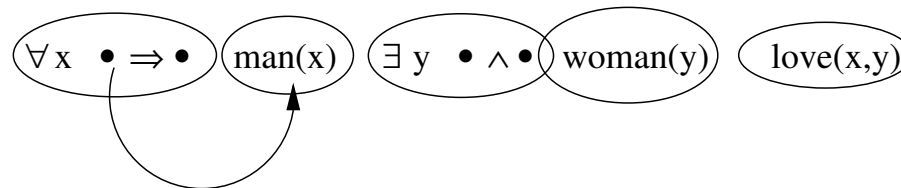
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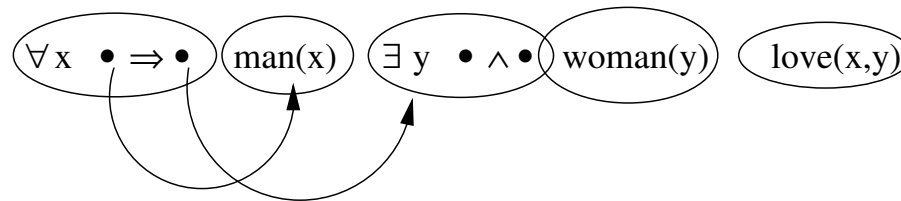
Scope dimension

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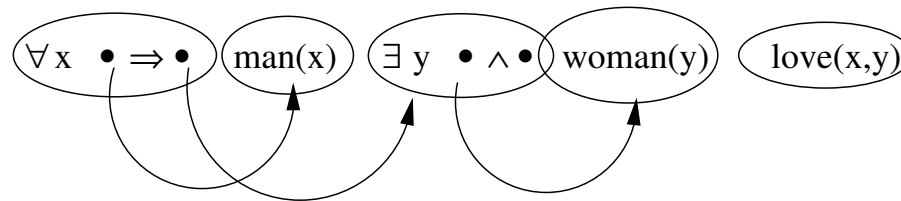
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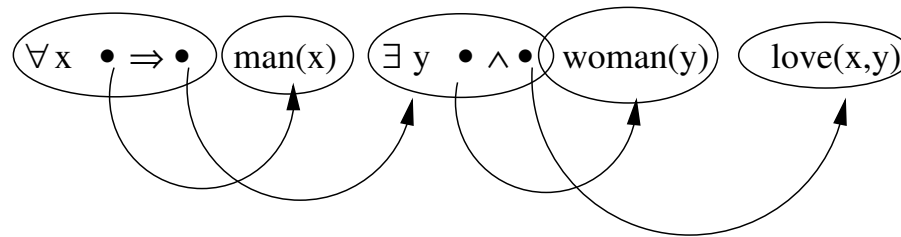
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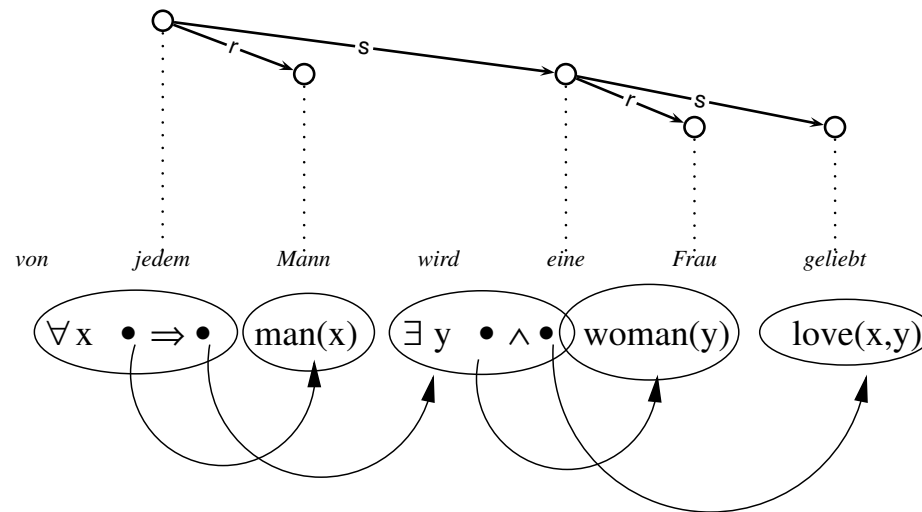
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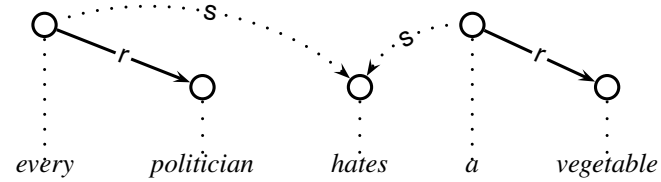
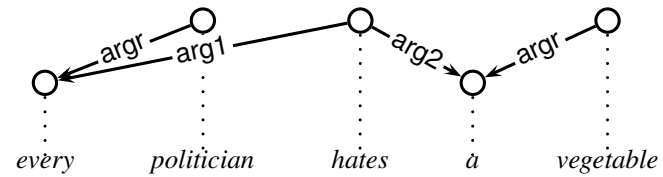
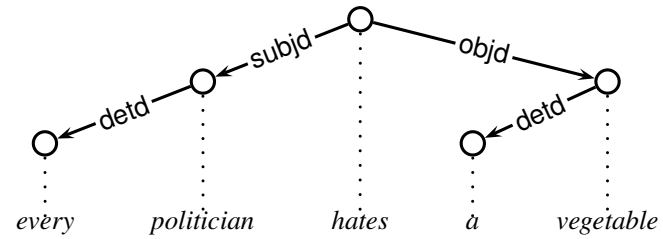


Scope dimension

$$\forall x \text{ man}(x) \Rightarrow \exists y \text{ woman}(y) \wedge \text{love}(x,y)$$



XDG analysis (ds, pa, sc)



XDG analysis (sc, strong/weak reading)

