# What syntax doesn't feed semantics Fake indexicals as indexicals

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### Introduction: 1

- Kaplan (1977,1989):
  - I is indexical, like today
    - 1. context-dependent
    - 2. directly referential
  - 2D semantics

#### I am speaking $\neq$ the speaker is speaking

- Heim (1991,2008), Kratzer (1998,2008), Jacobson (2008):
  - *I* is a pronoun, like *he*
  - pronouns have bound and referential readings
- Only I did my homework

sloppy others didn't do theirs:  $\forall x [x \neq \texttt{i} \rightarrow \neg \texttt{do.hw}(x,x)]$ 

• today: defend Kaplan

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# Outline

#### Introduction

#### Pake indexicals

Pronouns in Generative Linguistics VP ellipsis Only

#### 3 . . . as indexicals

Ellipsis resolution by unification Only by unification Avoiding sloppy names

#### De se binding and de re acquaintance Avoiding de se names

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Pronouns in Generative Linguistics VP ellipsis Only

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... as indexicals
Ellipsis resolution by unification
Only by unification
Avoiding sloppy names

*De se* binding and *de re* acquaintance Avoiding de se names

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Pronouns in Generative Linguistics VP ellipsis Only

### The syntax-semantics interface



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Pronouns in Generative Linguistics VP ellipsis Only

### The syntax-semantics interface



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Pronouns in Generative Linguistics VP ellipsis Only

### The syntax-semantics interface



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Pronouns in Generative Linguistics VP ellipsis Only

### Binding and coreference

SS: John did his homework

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Pronouns in Generative Linguistics VP ellipsis Only

### Binding and coreference



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Pronouns in Generative Linguistics VP ellipsis Only

## Binding and coreference



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Pronouns in Generative Linguistics VP ellipsis Only

## Binding and coreference



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Pronouns in Generative Linguistics VP ellipsis Only

## Binding and coreference



Pronouns in Generative Linguistics VP ellipsis Only

# Binding and coreference



 $\mathfrak{m}: \ \llbracket \texttt{do.homework.of(j,x)} \rrbracket_w^f = 1 \\ \texttt{iff John did homework of John} \\ \end{cases}$ 

```
context: his = f(x) = John
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Fake indexicals ... as indexicals ... as indexicals De se binding and de re acquaintance Pronouns in Generative Linguistics VP ellipsis Only

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Fake indexicals ... as indexicals ... as indexicals De se binding and de re acquaintance Pronouns in Generative Linguistics VP ellipsis Only

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Fake indexicals ... as indexicals ... as indexicals De se binding and de re acquaintance Pronouns in Generative Linguistics VP ellipsis Only

# Binding and coreference



Pronouns in Generative Linguistics VP ellipsis Only

# **VP** ellipsis

PF: John likes his dad but Peter doesn't

#### • ambiguous:

strict: Peter doesn't like John's sloppy: Peter doesn't like his own

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Pronouns in Generative Linguistics VP ellipsis Only

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  - delete an LF constituent at PF if it's *semantically equivalent* to an earlier constituent at LF

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Pronouns in Generative Linguistics VP ellipsis Only

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LF: John likes his dad but Peter doesn't <del>like his dad</del>

 $\begin{array}{l} (\texttt{context: his} = \texttt{his} = \texttt{John}) \\ \texttt{like.dad}(\texttt{j},\texttt{x}) \land \texttt{like.dad}(\texttt{p},\texttt{y}) \end{array}$ 

Pronouns in Generative Linguistics VP ellipsis Only

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 $\lambda x[like.dad(x,x)](j) \wedge$  $\neg \lambda x[like.dad(x, x)](p)$ 

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like.dad(j,j)∧ ¬like.dad(p,p)

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### Binding an indexical?

#### PF: I like my job, but Sue doesn't

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### Binding an indexical?



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### Binding an indexical?



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Pronouns in Generative Linguistics VP ellipsis Only

### Binding an indexical?



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### Binding an indexical?



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# Only

### PF: Only I did my homework

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Pronouns in Generative Linguistics VP ellipsis Only

# Only



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Pronouns in Generative Linguistics VP ellipsis Only

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Pronouns in Generative Linguistics VP ellipsis Only

# Only



$$\mathtt{only}(\mathtt{x})(\mathtt{P}){\equiv} orall \mathtt{y}[\mathtt{y} 
eq \mathtt{x} 
ightarrow \neg \mathtt{P}(\mathtt{y})]$$

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Pronouns in Generative Linguistics VP ellipsis Only

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$$\texttt{only}(\mathtt{x})(\mathtt{P}){\equiv} \forall \mathtt{y}[\mathtt{y} \neq \mathtt{x} 
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Pronouns in Generative Linguistics VP ellipsis Only

# Only



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Ellipsis resolution by unification Only by unification Avoiding sloppy names

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#### De se binding and de re acquaintance Avoiding de se names

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### Ellipsis by unification

#### SS: I like my job, but Sue doesn't

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### Ellipsis by unification

#### SS: I like my job, but Sue doesn't

#### $\texttt{like.job(i,i)} \land \neg \texttt{P(s)}$

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### Ellipsis by unification

SS: I like my job, but Sue doesn't

like.job
$$(i,i) \land \neg P(s)$$
  
P $(i) \doteq$  like.job $(i,i)$ 

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### Ellipsis by unification

SS: I like my job, but Sue doesn't

$$\begin{array}{c} \texttt{like.job(i,i)} \land \neg \texttt{P(s)} \\ \texttt{P(i)} \doteq \texttt{like.job(i,i)} \\ & \swarrow \\ \texttt{P} \mapsto \lambda \texttt{x}[\texttt{like.job(x,i)}] & \qquad \searrow \\ \texttt{P} \mapsto \lambda \texttt{x}[\texttt{like.job(x,x)}] \end{array}$$

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Ellipsis resolution by unification Only by unification Avoiding sloppy names

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cf. Dalrymple et al. 1991

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### Only by unification

#### SS: Only $[I]_F$ did my homework

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### Only by unification

#### SS: Only $[I]_F$ did my homework

$$\forall \mathtt{x} [\mathtt{x} \neq \mathtt{i} \to \neg \mathtt{B}(\mathtt{x})]$$

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### Only by unification

#### SS: Only $[I]_F$ did my homework

$$\forall x[x \neq i \rightarrow \neg B(x)] \\ B(i) \doteq do.hw(i,i)$$

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# Only by unification

SS: Only  $[I]_F$  did my homework

$$\begin{array}{c} \forall \mathbf{x} [\mathbf{x} \neq \mathbf{i} \rightarrow \neg \mathbf{B}(\mathbf{x})] \\ \mathbf{B}(\mathbf{i}) \doteq \mathbf{do.hw}(\mathbf{i}, \mathbf{i}) \\ \swarrow \\ \mathbf{B} \mapsto \lambda \mathbf{x} [\mathbf{do.hw}(\mathbf{x}, \mathbf{x})] \end{array}$$

 $B \mapsto \lambda x[do.hw(x,i)]$ 

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# Only by unification

SS: Only  $[I]_F$  did my homework

cf. Pulman (1997)

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# Conclusions

- semantic/pragmatic alternative:
  - minimized syntactic levels
  - I is true indexical, interpreted in situ
  - derive strict/sloppy by HOU

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# Conclusions

- semantic/pragmatic alternative:
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- Kaplan saved?

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# No sloppy names

#### John likes John's job but Sue doesn't

• strict: Sue doesn't like John's job

Only Mary likes Mary's job

• strict:  $\rightsquigarrow$  others don't like Mary's

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### Predictions

- generative:
  - names  $\neq$  pronouns
  - Principle C prohibits bound names

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- generative:
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- generative:
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- pragmatic:
  - names  $\approx$  indexicals: directly referential

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- pragmatic:
  - names  $\approx$  indexicals: directly referential
  - prediction: strict + sloppy (by HOU)

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# Pragmatic blocking

- competing alternatives:
- (1) Only Mary likes Mary's job
- (2) Only Mary likes her job

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# Pragmatic blocking

- competing alternatives:
- (1) Only Mary likes Mary's job

(2) Only Mary likes her job

- (1) violates Principle C
- (1) more marked by referential hierarchy:
  - definite descriptions > names > pronouns

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    - $\bullet\,$  prioritize background containing Mary's~job

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  - $\bullet$  topicalizes/presupposes/makes salient  ${\rm Mary's\ job}$ 
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    - $B \mapsto \{\lambda x[like.job(x,m)], \lambda x[like.job(x,x)]\}$

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# Conclusions

- generative
  - syntax/semantics: PF, LF, SS,  $\mathcal{L}, \mathfrak{m}$
  - pronouns vs names
    - binding/reference ambiguity: he, she, they, I, you,...
    - reference: John, Sue,...
  - in ellipsis, focus, only:
    - reference  $\rightarrow$  strict
    - $\bullet \ \ binding \rightarrow sloppy$

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  - in ellipsis, focus, only:
    - reference  $\rightarrow$  strict
    - $\bullet \ \ \text{binding} \to \text{sloppy}$
- pragmatic
  - semantics/pragmatics: SS,  $\mathcal{L}, \mathfrak{m}$
  - anaphoric vs directly referential
    - anaphoric: he, she, they,...
    - referential: I, you, John, today, ...
  - HOU pragmatically derives strict/sloppy
  - sloppy names pragmatically blocked by anaphoric alternative

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#### Avoiding de se names

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#### De se binding and de re acquaintance Avoiding de se names

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Avoiding de se names

### De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance from the fire

Avoiding de se names

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Avoiding de se names

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"I'm at safe distance from fire"  $BEL_i[safe(i)]$
Avoiding de se names

## De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance	?I thought that I was remarkably
from the fire	calm
"I'm at safe distance from fire"	"that guy is remarkably calm"
$BEL_{i}[safe(i)]$	

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Avoiding de se names

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"I'm at safe distance from fire"  $BEL_i[safe(i)]$ 

"that guy is remarkably calm" <br/>  ${\rm BEL}_i[{\tt remarkably.calm(i)}]$ 

Avoiding de se names

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"I'm at safe distance from fire"  $BEL_i^* \lambda x[safe(x)]$ 

"that guy is remarkably calm" BEL<sub>i</sub>[remarkably.calm(i)]

Avoiding de se names

# De se and de re

 $\text{BEL}_{i}^{*}\lambda x[\texttt{safe}(x)]$ 

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I thought I was at a safe distance	?I thought that I was remarkably
from the fire	calm
"I'm at safe distance from fire"	"that guy is remarkably calm"

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 $\operatorname{BEL}_{i}^{e \times et} \langle i, \lambda x[r.calm(x)] \rangle$ 

Avoiding de se names

# De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance from the fire	?I thought that I was remarkably calm
"I'm at safe distance from fire"	"that guy is remarkably calm"
${ m BEL}_{i}^{*}\lambda x[{ m safe}(x)]$	$\mathtt{R}(\mathtt{i},\mathtt{i}) \wedge \mathtt{BEL}_{\mathtt{i}}^* \lambda \mathtt{x}[\mathtt{r.calm}(\imath \mathtt{y}[\mathtt{R}(\mathtt{x},\mathtt{y})]]$

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Avoiding de se names

# De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance ?I thought that I was remarkably calm

"I'm at safe distance from fire"  $BEL_i^* \lambda x[safe(x)]$ 

"that guy is remarkably calm"  $R(i,i) \wedge BEL_i^* \lambda x[r.calm(\imath y[R(x,y)]]$  $R = \lambda x \lambda y[see.on.tv(x,y)]$ 

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Avoiding de se names

## De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance from the fire ? [I thought that I was remarkably calm "I'm at safe distance from fire" "that guy is remarkably calm"  $R(i,i) \land BEL_i^*\lambda x[safe(\imath y[R(x,y)])] R(i,i) \land BEL_i^*\lambda x[r.calm(\imath y[R(x,y)])]$ 

 $R = \lambda x \lambda y [x = y]$   $R = \lambda x \lambda y [x = y]$   $R = \lambda x \lambda y [see.on.tv(x, y)]$ 

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Avoiding de se names

## De se and de re

Kaplan is telling the story of the time he didn't realize his pants were on fire while seeing himself on fire on live  $\mathsf{TV}$ 

I thought I was at a safe distance from the fire ?! I thought that I was remarkably calm "I'm at safe distance from fire" "that guy is remarkably calm"  $R(i, i) \land BEL_i^* \lambda x[safe(\imath y[R(x, y)])] R(i, i) \land BEL_i^* \lambda x[r.calm(\imath y[R(x, y)])]$ 

 $\mathtt{R} = \lambda \mathtt{x} \lambda \mathtt{y} [\mathtt{x} = \mathtt{y}]$   $\mathtt{R} = \lambda \mathtt{x} \lambda \mathtt{y} [\mathtt{see.on.tv}(\mathtt{x}, \mathtt{y})]$ 

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Avoiding de se names

#### De se names

1 # Kaplan thought Kaplan was at a safe distance from the fire |

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Avoiding de se names

#### De se names

- 1 # Kaplan thought Kaplan was at a safe distance from the fire
- Chierchia'89: Principle C blocks binding but<sub>i</sub>2-¿ coreference ⇒ de re (non-de se)

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#### De se names

1 # Kaplan thought Kaplan was at a safe distance from the fire

- Chierchia'89: Principle C blocks binding but<sub>i</sub>2-¿ coreference ⇒ de re (non-de se)
- cheaper alternative:
- 2 Kaplan thought he was at a safe distance from the fire

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### De se names

- 1 # Kaplan thought Kaplan was at a safe distance from the fire
- Chierchia'89: Principle C blocks binding but<sub>i</sub>2-¿ coreference ⇒ de re (non-de se)
- cheaper alternative:
- $2\,$  Kaplan thought he was at a safe distance from the fire
- ulterior pragmatic motive for using (1)?

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## De se names

- 1 # Kaplan thought Kaplan was at a safe distance from the fire
- Chierchia'89: Principle C blocks binding but<sub>i</sub>2-¿ coreference ⇒ de re (non-de se)
- cheaper alternative:
- $2\,$  Kaplan thought he was at a safe distance from the fire
- ulterior pragmatic motive for using (1)?
  - $\operatorname{Kaplan} \in \mathsf{reported thought}$

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# De se names

- 1 # Kaplan thought Kaplan was at a safe distance from the fire
- Chierchia'89: Principle C blocks binding but<sub>i</sub>2-¿ coreference ⇒ de re (non-de se)
- cheaper alternative:
- $2\,$  Kaplan thought he was at a safe distance from the fire
- ulterior pragmatic motive for using (1)?
  - $Kaplan \in reported thought$
- generalization: use marked coref res X only if X matches the reported thought character

#Kaplan thought Kaplan was remarkably calm

Kaplan thought the guy on TV was remarkably calm