

# MODIFYING THE SYNTAX OF SPATIAL P IN ENGLISH

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## Abstract

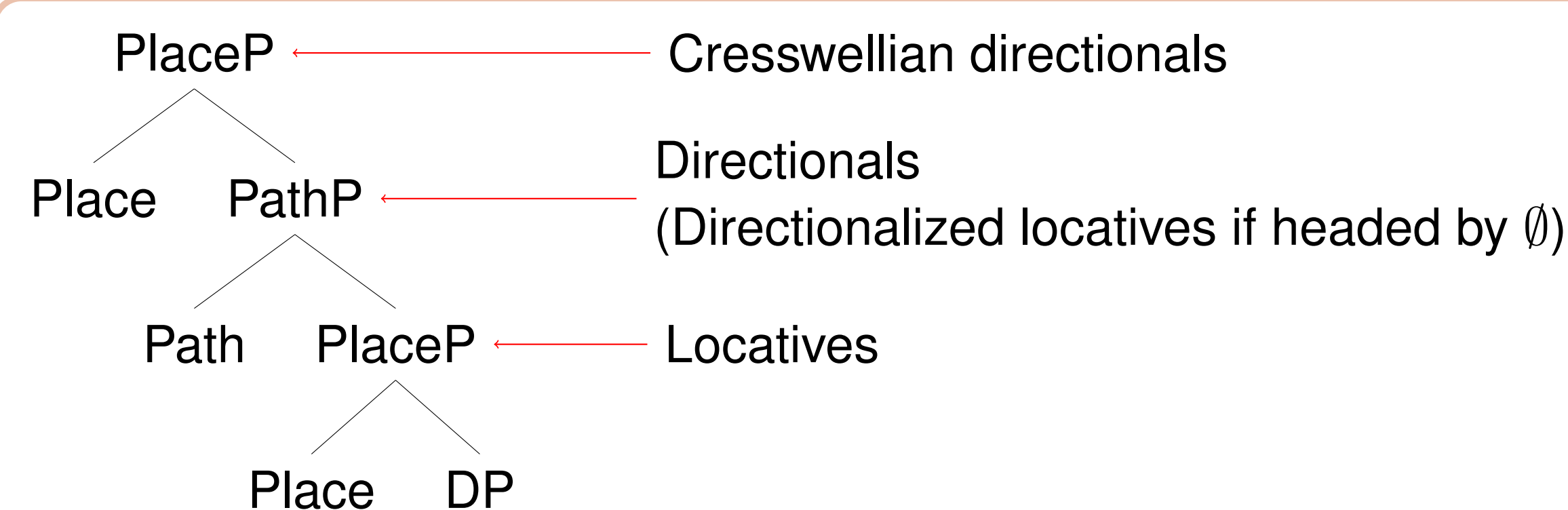
Evidence from modification shows that the descriptive notions of directional and locative PPs do not constitute syntactic categories as Svenonius (2010) claims. The same type of evidence suggests that the categories Svenonius proposes do not combine as he proposes they do.

## Background

- Two descriptive labels for spatial P's/PP's:
    - Locative
    - Directional
  - Spatial prepositions can be classified using these labels.
    - Locative P's: *inside, between, beside, above, etc.*
    - Directional P's: *into, towards, from, across, through, etc.*
  - Interpretations of PPs in context can also be classified this way.
  - The descriptive label of a PP  $\neq$  the descriptive label of its head.
- (1) **Directionalized locatives** (directional PP, locative P)  
The bottle floated under the bridge. ( $\approx$  *passed under the bridge floating*)
  - (2) **Cresswellian directionals** (locative PP, directional P)(Cresswell 1978)  
Across the meadow, a band is playing *The H.M.S. Pinafore*.  
( $\approx$  *at the end of a journey across the meadow*)

## The Standard Analysis

- Svenonius (2010) proposes that the locative and directional labels correspond to syntactic categories.
  - Locative PP  $\leftrightarrow$  PLACEP
  - Directional PP  $\leftrightarrow$  PATHP
- PATHPs embed PLACEPs.
- Directionalized locatives are PATHPs with null heads that embed PLACEPs.
- Cresswellian locatives are PLACEPs with null heads that embed PATHPs.
- cf. the semantics of Jackendoff (1983).



## The Modifiers

### Halfway

- Modifies path-denoting PPs.  
*halfway through the forest*
- Imposes idiosyncratic path interpretation on place-denoting PPs.  
*halfway between the posts vs halfway inside the house.*
- cf Bochnak (2013).

### Well

- Modifies some place-denoting PPs.  
*well behind the house*
- Does not modify path-denoting PPs.  
*\*well to the store*
- cf Yang (to appear).

## Modification Tests

### Directionalized locatives

[*halfway* Path[*well* Place DP]]

- Prediction:  $\checkmark$  *halfway*,  $\checkmark$  *well*

- (3) a. The dog ran halfway behind the house. (not as predicted)  
 $\neq$  halfway TO behind the house  
b. The dog ran well behind the house. (as predicted)

### into/onto

[*halfway* [{in-/on-}<sub>Place</sub> -to<sub>Path</sub>][*well* <sub>t<sub>Place</sub></sub> DP]]

- Prediction:  $\checkmark$  *halfway*, ? *well*

- (4) a. The dog ran halfway into the house. (not as predicted)  
 $\neq$  halfway TO in the house  
b. The dog ran well into the house. (no clear prediction)

### Cresswellian directionals

[*well*<sub>1</sub> Place[*halfway* Path[*well*<sub>2</sub> Place DP]]]

- Prediction:  $\checkmark$  *well*<sub>1</sub>,  $\checkmark$  *halfway*, ? *well*<sub>2</sub>

- (5) a. Halfway across the meadow, a band is playing. . . (as predicted)  
 $\approx$  At the end of a journey halfway across the meadow  
b. Well across the meadow, a band is playing. . . ( $\checkmark$  *well*<sub>1</sub>, \**well*<sub>2</sub>)  
 $\approx$  Well at the end of a journey across the meadow  
 $\neq$  At the end of a journey VIA \*well ON the meadow

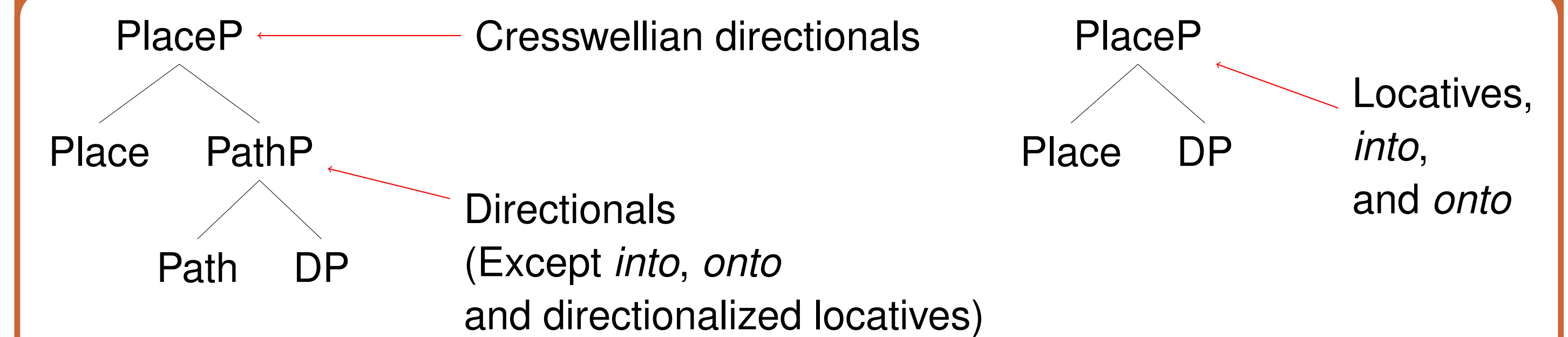
## Summary

- There is no evidence for Path heads dominating Place heads.
- *into, onto*, and directionalized locatives pattern with PlacePs.
- There is evidence for Cresswellian Place heads.

## Proposal

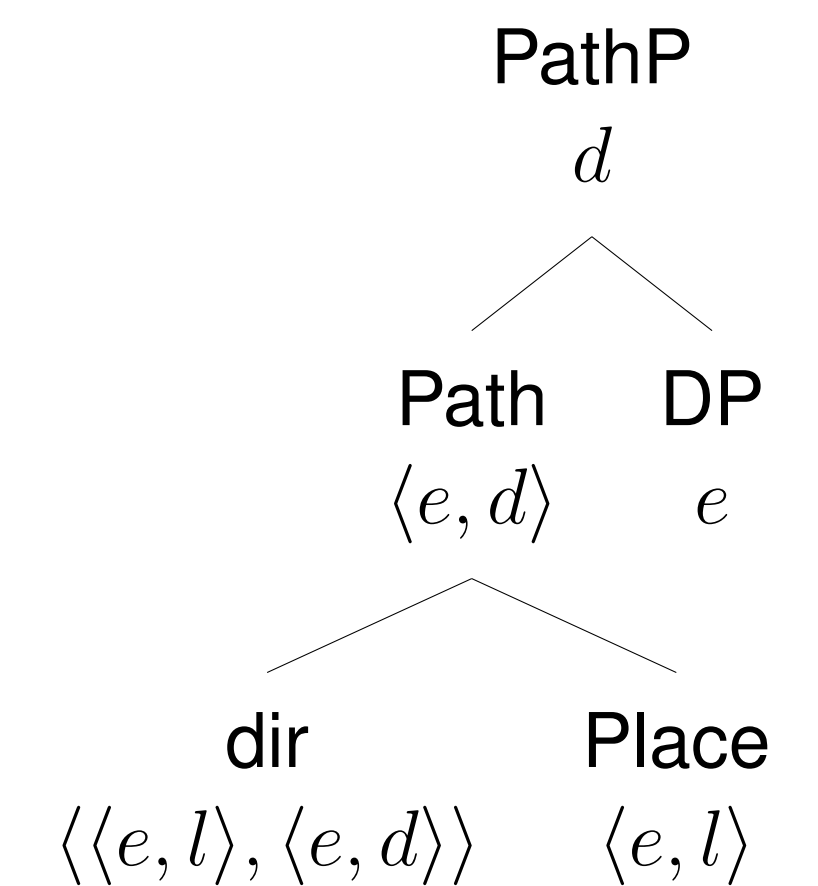
- Modification tests suggest a different mapping from surface labels to syntax.

### The Spatial PPs



## Further Arguments

- Svenonius (2010) assumes the vector space semantics of Zwarts and Winter (2000).
- **Simplified spatial types**
  - Entities (*e*)
  - Locations (*l*)
  - Trajectories(*d*)
- **Functions**
  - Place functions ( $\langle e, l \rangle$ )
  - *dir* functions ( $\langle \langle e, l \rangle, \langle e, d \rangle \rangle$ )
- No Path words built from complex Places.  
*through*=VIA(INSIDE), *across*=VIA(ON), \**xyz*=VIA(BETWEEN)
- Requires fewer null heads and head movement operations.
- *I'm into it. The boss is onto us. vs. We're {at/to} the store.*



## References

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