

The Component Unit Introducing a Novel Unit of Syntactic Unit

Timothy Osborne, [Ruochen Niu](#)

School of International Studies
Zhejiang University, Hangzhou, China

E-mail: tjo3ya@yahoo.com

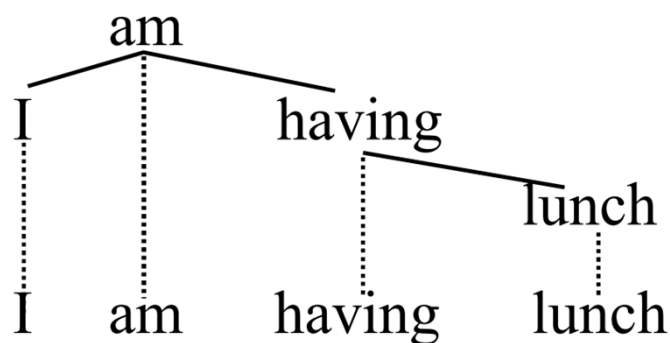


Introduction



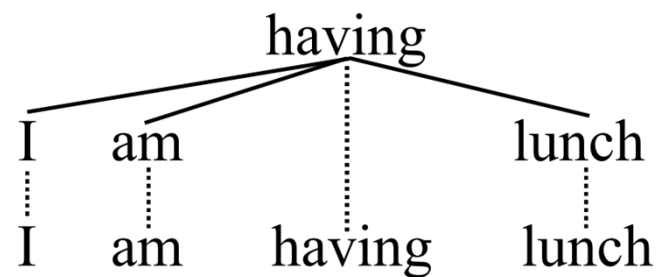
- **Helpful in resolving controversial structural issues**

e.g. I am having lunch.



(a) Traditional DG Analysis

or



(b) UD Annotation Scheme

Claims



- How speakers organize words into sentences can be determined from **chunking data** collected from informants.
- There is a novel unit of DG that helps to **predict** how informants will chunk sentences. This unit is the ***component***.
- One can use the component unit as a basis for motivating analyses of sentence structure, and thus **resolve debatable structural issues**.

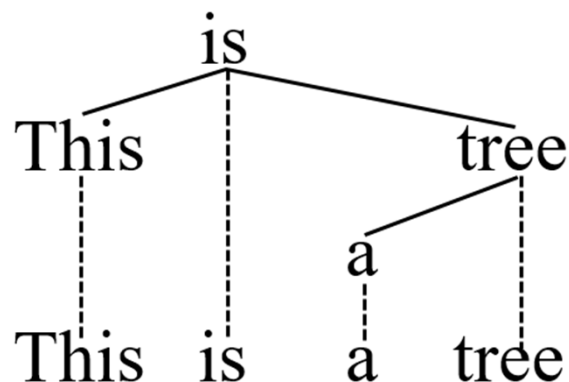
Introduction



The component:

- continuous in both **precedence and dominance**.
- (= String of words **linked by dependencies**)

e.g.



8 components: 😊

[This], [is], [a], [tree];

[This is], [a tree];

[is a tree]; and [This is a tree]

2 non-components: 😞

[is a] and [this is a]

Methodology & Results



Controversial issues:

- the status of **auxiliary verbs, prepositions, determiners,** and **object predicatives**

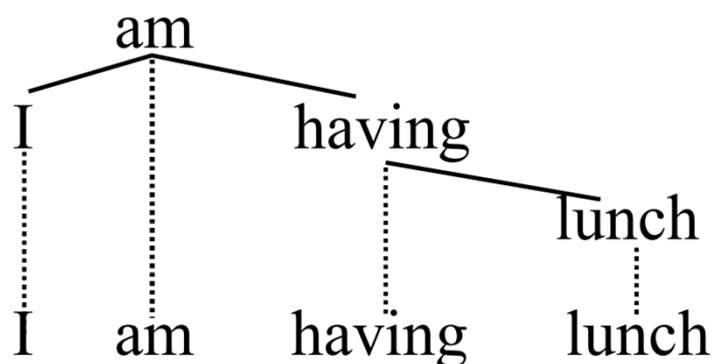
e.g. I am having lunch.

- a. I am | having lunch. – 26 responses
- b. I | am having lunch. – 10 responses
- c. I am having | lunch. – 7 responses

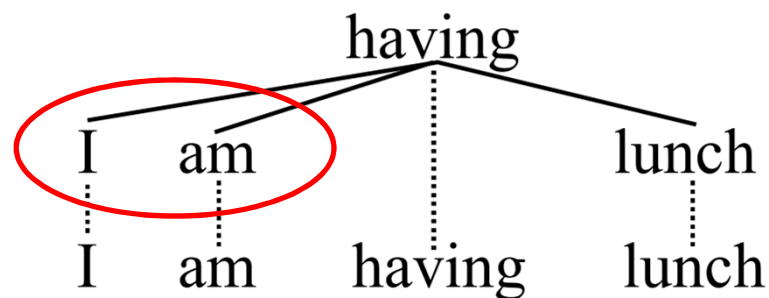
Results & Discussion



- **The status of auxiliary verbs**



Traditional DG Analysis



UD Annotation Scheme

- *I am* is not a component in the UD analysis
- **All resulting chunks** are components in the traditional analysis

Auxiliary verb > Content verb

Summary



- **the component unit**
 - **chunking experiments**
- resolve debatable issues**
- **easily extendable to other languages**

Acknowledgement



The research presented in this talk was funded by the Ministry of Education of the People' s Republic of China, Grant #15YJA74001.

Thanks for your attention!

Timothy Osborne, Ruochen Niu

School of International Studies
Zhejiang University, Hangzhou, China

E-mail: tjo3ya@yahoo.com