

Language and thought

Day 3: Why are syntactic trees so complicated?

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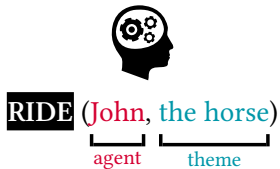
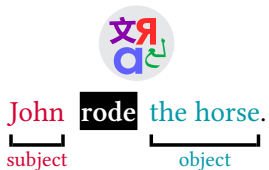
1 Recap

2 Decompositional approach

3 Generative semantics

4 Unaccusative verbs

Linking problem



Linking problem





Linking problem

Absolute linking:

- Link **agent** to **subject**, **theme** to **object**

Relative linking:

- Link arguments in a way that preserves prominence relations
 - **subject** > **object**
 - **agent** > **theme**

Argument structure alternations



Causative alternation:

- (1) John broke the vase.
- (2) The vase broke.

Argument structure alternations



Causative alternation:

- (1) John broke the vase.
- (2) The vase broke.

Dative alternation:

- (3) Susan gave toys to the children.
- (4) Susan gave the children toys.

(Bresnan et al. 2007)

Argument structure alternations



Locative (*spray/load*) alternation:

- (5) John loaded the hay onto the wagon.
- (6) John loaded the wagon with the hay.

(Beavers 2010)

Argument structure alternations



Locative (*spray/load*) alternation:

- (5) John loaded the hay onto the wagon.
- (6) John loaded the wagon with the hay.

(Beavers 2010)

Psych verbs:

- (7) John worried about the television set.
- (8) The television set worried John.

(Pesetsky 1995)



Locative inversion:

(9) The well is in the village.

(10) In the village is a well.

(adapted from Bresnan and Kanerva 1989)



Locative inversion:

(9) The well is in the village.

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(adapted from Bresnan and Kanerva 1989)

Passives:

(11) John broke the vase.

(12) The vase was broken (by John).



Puzzle: unaccusative verbs

intransitive verb

John **laughed** .
subject=agent

transitive verb

John **broke** the vase .
subject=agent object=theme

Puzzle: unaccusative verbs

intransitive verb
(unergative)

John **laughed** .
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intransitive verb
(unaccusative)

The vase **broke** .
subject=theme

transitive verb

John **broke** the vase .
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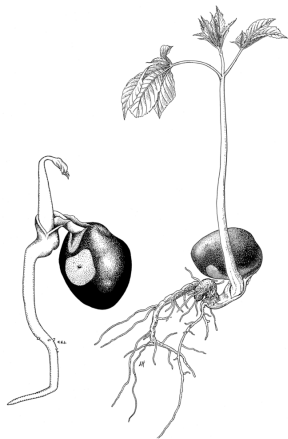
1 Recap

2 Decompositional approach

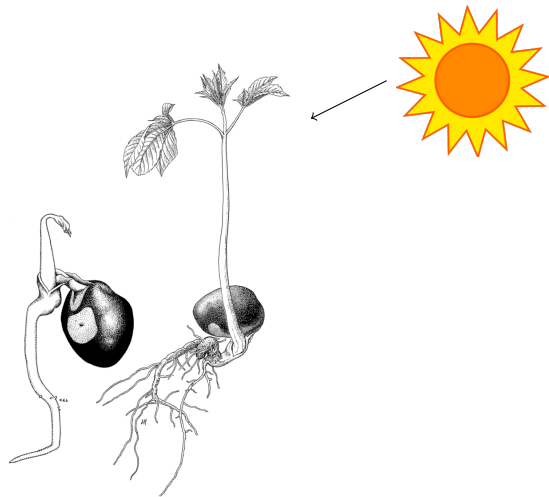
3 Generative semantics

4 Unaccusative verbs

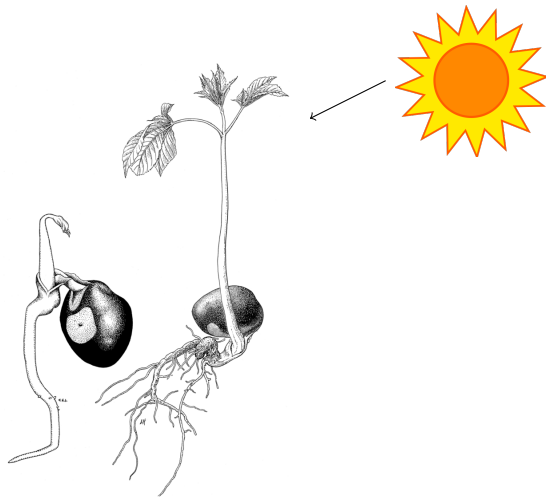
Two approaches to argument structure



Two approaches to argument structure

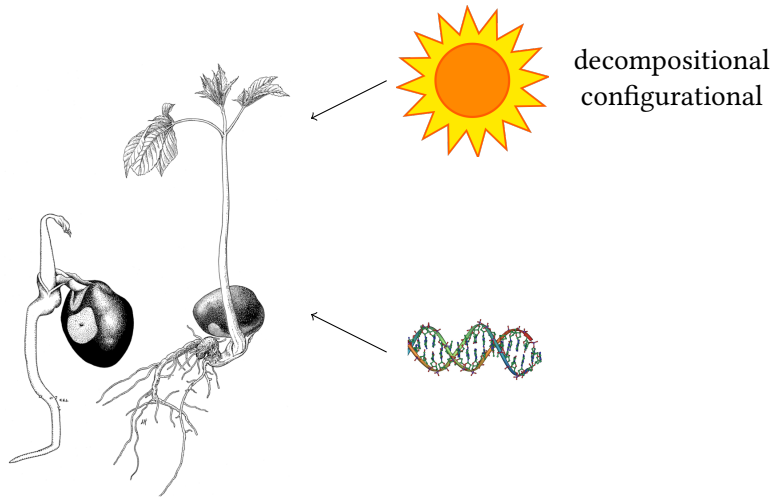


Two approaches to argument structure

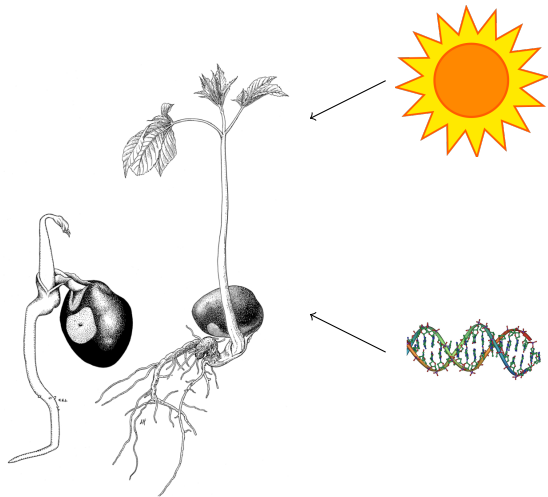


decompositional
configurational

Two approaches to argument structure



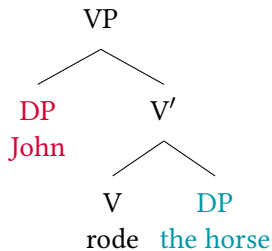
Two approaches to argument structure



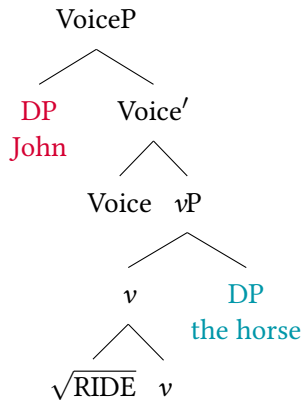
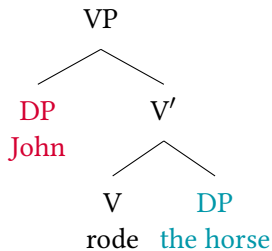
decompositional
configurational

projectionist
lexicalist

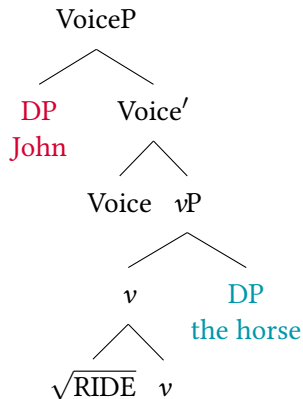
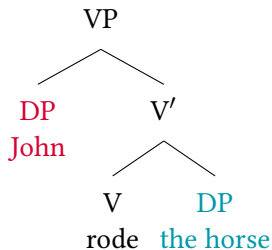
Decompositional approach



Decompositional approach



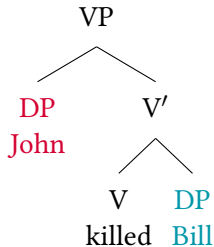
Decompositional approach



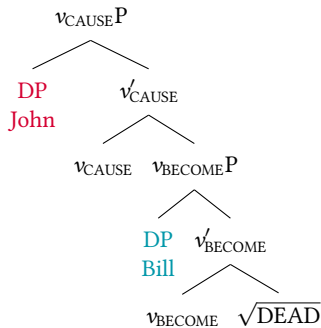
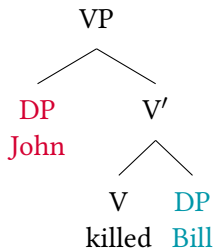
Absolute linking:

Link **agent** to **subject**, **theme** to **object**

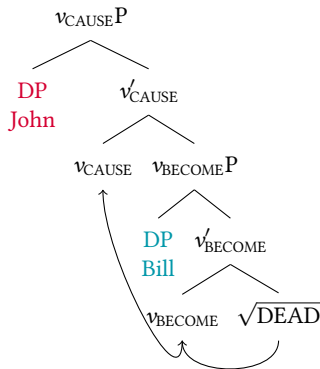
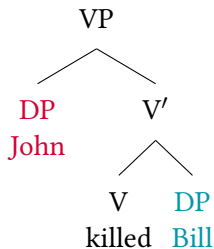
Decompositional approach



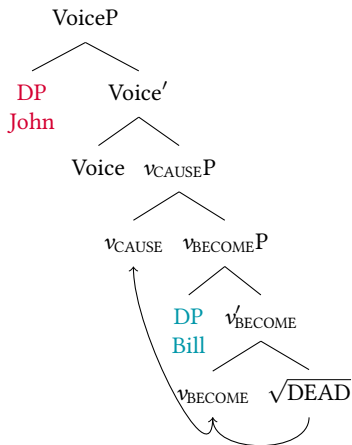
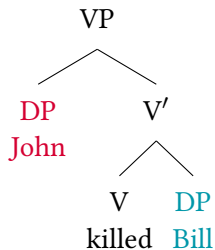
Decompositional approach



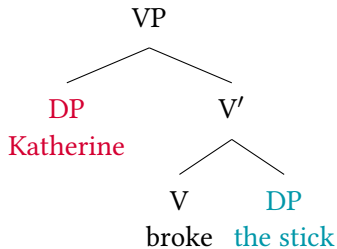
Decompositional approach



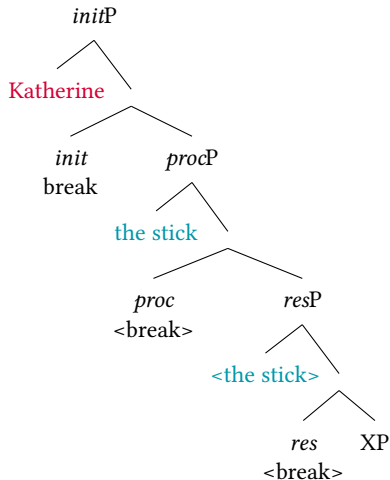
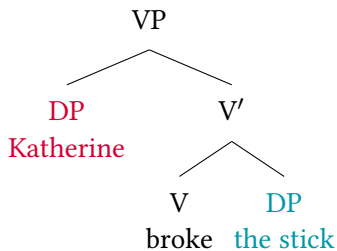
Decompositional approach



Decompositional approach



Decompositional approach



(Ramchand 2008:75)



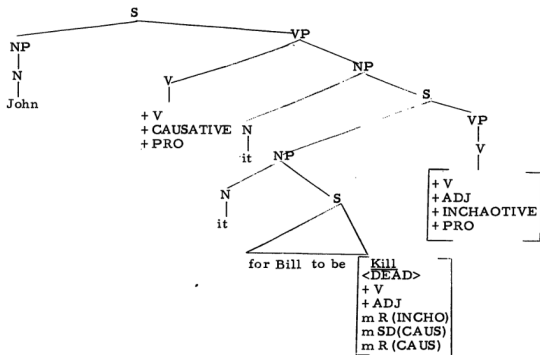
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Generative semantics



(Lakoff 1966)



J. A. Fodor (1970)

Three reasons for not deriving “kill” from “cause to die”



(13) John caused Bill to die on Sunday by stabbing him on Saturday.



(13) John caused Bill to die on Sunday by stabbing him on Saturday.

(14) *John killed Bill on Sunday by stabbing him on Saturday.

(Fodor 1970)



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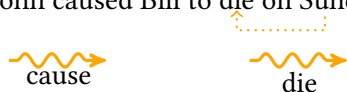


(14) *John killed Bill on Sunday by stabbing him on Saturday.

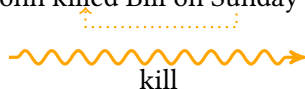


(Fodor 1970)

(13) John caused Bill to die on Sunday by stabbing him on Saturday.



(14) *John killed Bill on Sunday by stabbing him on Saturday.



(Fodor 1970)



(15) John caused Mary to die and it surprised me that he did so.

(16) John caused Mary to die and it surprised me that she did so.



(15) John caused Mary to die and it surprised me that he did so.

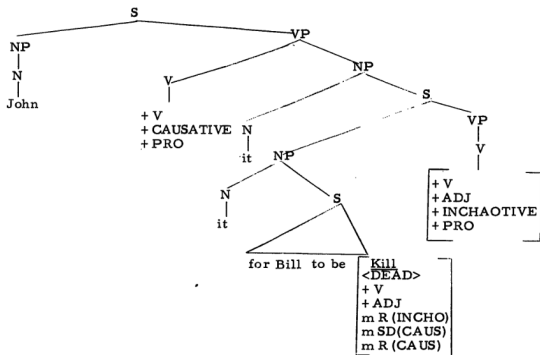
(16) John caused Mary to die and it surprised me that she did so.

(17) John killed Mary and it surprised me that he did so.

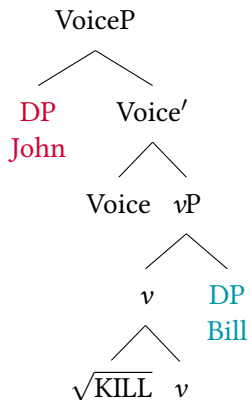
(18) *John killed Mary and it surprised me that she did so.

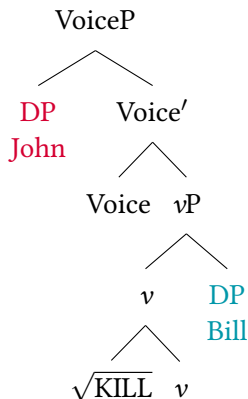
(Fodor 1970)

Generative semantics



(Lakoff 1966)





Absolute linking:

Interpret **specifier of VoiceP** as **agent**, **complement of v** as **theme**



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Unaccusative verbs



intransitive verb

John **laughed** .
subject=agent

transitive verb

John **broke** the vase .
subject=agent object=theme

Unaccusative verbs



intransitive verb
(unergative)

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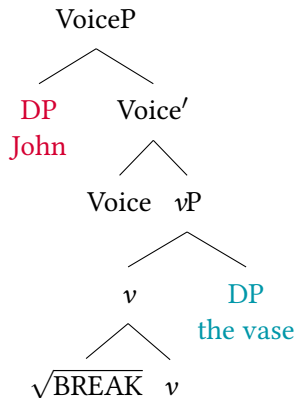
John **broke** the vase .
subject=agent object=theme

What are the structures for each of these verb classes?



Transitive verbs

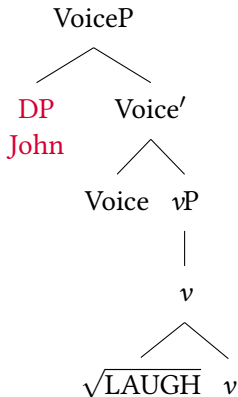
(19) John broke the vase.



Unergative verbs



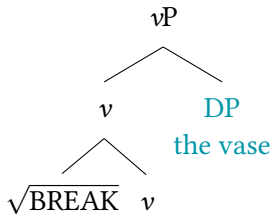
(20) John laughed.



Caveat: This tree could look different depending on one's assumptions.

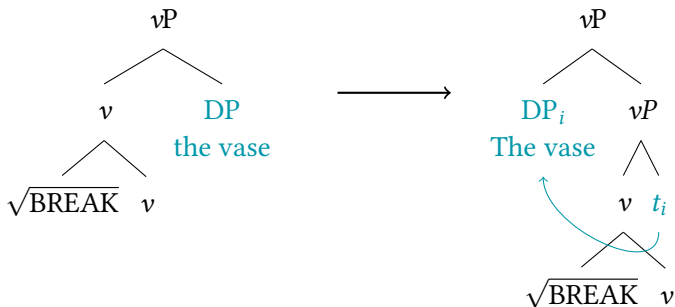
Unaccusative verbs

(21) The vase **broke** .



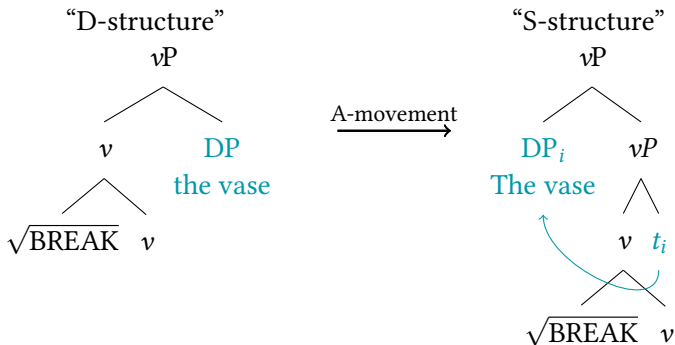
Unaccusative verbs

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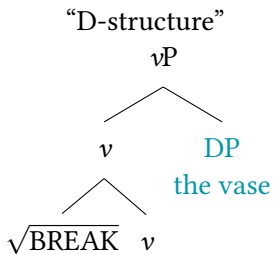
Unaccusative verbs

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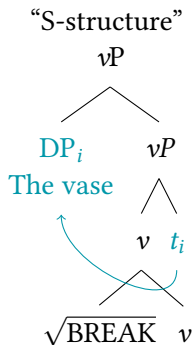


Unaccusative verbs

(21) The vase **broke** .



A-movement
→



Case? EPP?



- 1 What is one thing that you learned today?
- 2 What is one question that you have?

Bonus: unaccusative verbs in Mandarin



Mandarin Chinese:

Unaccusative / anticausative alternant:

- (22) *Huāpíng* pò-le.
vase break-PFV
'The vase broke.'

Bonus: unaccusative verbs in Mandarin



Mandarin Chinese:

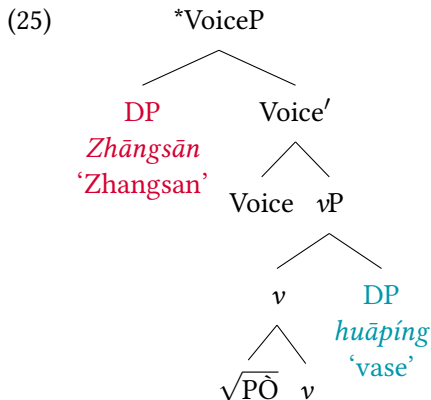
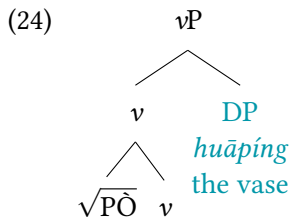
Unaccusative / anticausative alternant:

- (22) *Huāpíng* pò-le.
vase break-PFV
'The vase broke.'

Transitive / causative alternant:

- (23) **Zhāngsān* pò-le *huāpíng*.
Zhangsan break-PFV vase
'Zhangsan broke the vase.'

Bonus: unaccusative verbs in Mandarin



How can the decompositional approach explain the contrast between (24) and (25)? Why is there no comparable contrast in English?



- Beavers, John. 2010. The structure of lexical meaning: Why semantics really matters. *Language* 86:821–864.
- Bresnan, Joan, Anna Cueni, Tatiana Nikitina, and R. Harald Baayen. 2007. Predicting the dative alternation. In *Cognitive Foundations of Interpretation*, ed. Gerlof Bouma, Irene Maria Krämer, and Joost Zwarts, volume 190, 69–94. Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- Bresnan, Joan, and Jonni M. Kanerva. 1989. Locative inversion in Chichewa: A case study of factorization in grammar. *Linguistic Inquiry* 20:1–50.
- Fodor, J. A. 1970. Three reasons for not deriving “kill” from “cause to die”. *Linguistic Inquiry* 1:429–438.
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- Ramchand, Gillian Catriona. 2008. *Verb meaning and the lexicon: A first-phase syntax*. Cambridge, UK: Cambridge University Press.