

TRANSITIVITY IN MINIMALISM

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Ntemou (2024)

- “argument structure (...) serves as the **basis for phrasal structure**” (p. 11)
- “lexical-syntactic processes **determine** both the morphology and the position of arguments in the sentence” (p. 16)
- “verb argument structure plays a crucial role in sentence formation as the verb **requires** a certain number of arguments to be formulated and assigns grammatical functions to these arguments” (p. 62)

Government & Binding Theory (Chomsky 1981)

1. verbs select a number of arguments (argument structure)
2. the verb projects a syntactic structure for its arguments (Projection Principle)
3. noun phrases 'carry' a thematic role (theta-role), in fact they must do so by the
4. Theta Criterion: (argument) noun phrases must have (one and only one) theta-role

Minimalism

- one structure-building operation: Merge
- Merge works bottom-up, by adding elements to the top of the structure
- movement is also Merge ('internal Merge')
- derivation freely mixes Merge of new and existing material
- no longer any distinction between Deep Structure and Surface Structure

Consequences for classical Theta Theory

1. verbs select a number of arguments (argument structure)
this is still true: verbs have a certain argument structure
2. the verb projects a syntactic structure for its arguments (Projection Principle)
but structure is created by Merge, not as a projection of the verb's argument structure
3. noun phrases 'carry' a thematic role (theta-role), in fact they must do so by the
and this is strange: NPs are never marked for carrying a particular theta-role
4. Theta Criterion: (argument) noun phrases must have (one and only one) theta-role
and the Theta Criterion holds at D-structure, which can no longer be defined

These passages are no longer self-evident

- “argument structure (...) serves as the basis for phrasal structure” (p. 11)
no: phrase structure is generated by Merge independent of argument structure
- “lexical-syntactic processes determine both the morphology and the position of arguments in the sentence” (p. 16)
new question: how do elements that are merged in a certain position receive their interpretation?
- “verb argument structure plays a crucial role in sentence formation as the verb requires a certain number of arguments to be formulated and assigns grammatical functions to these arguments” (p. 62)
this was already problematic in GB-theory, because of the phenomenon of pseudo-transitivity

Pseudotransitivity

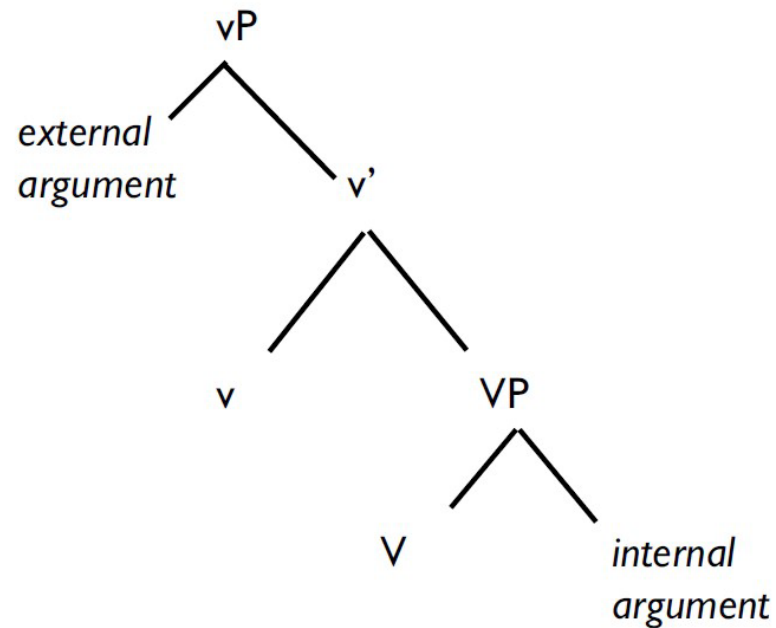
- 1) She is eating
- 2) She is eating an orange

- 3) X kills *(Y)
- 4) X kills for a living

>> It's very hard to maintain that a verb **requires** the presence of an argument

>> This suggests that argument structure is not **generative** but **interpretative**

VP-internal argument positions



v ('little v') = locus of agentivity

V = the verbal root

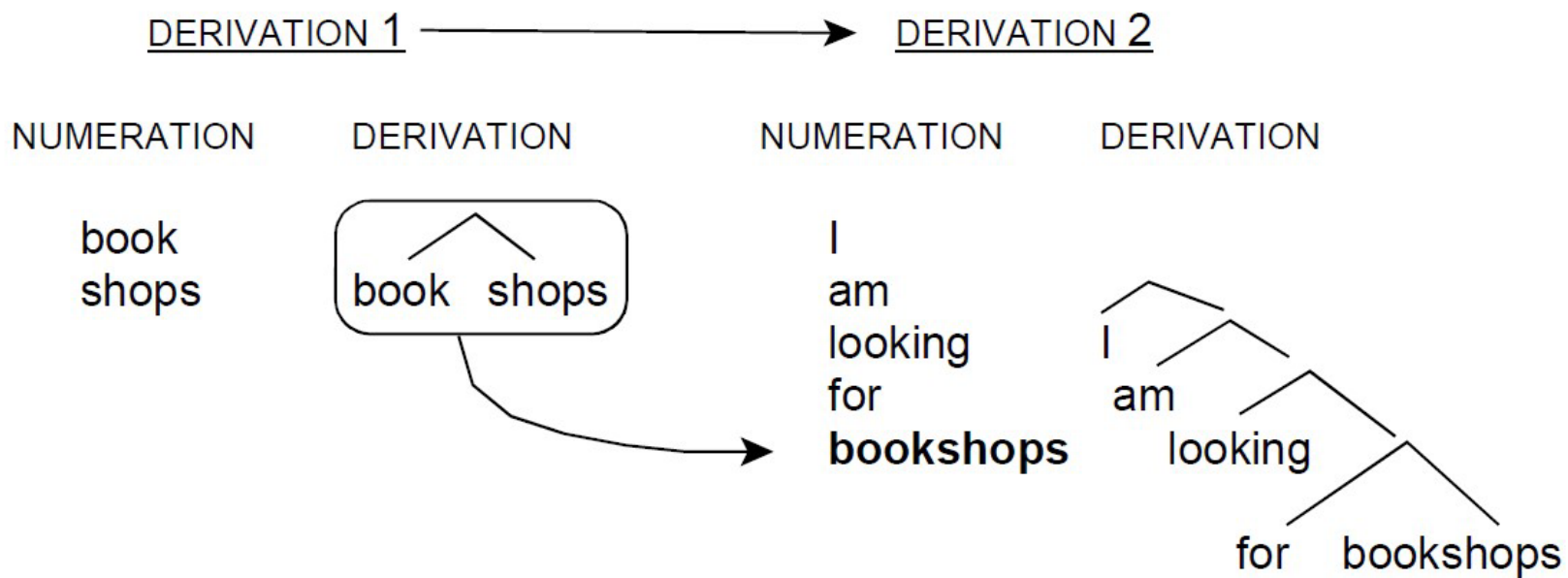
V 'conflates' with v to create the VERB

(e.g. *eat* < $v_{DO} + V_{eat}$)

Lexical decomposition: lexical or syntactic?

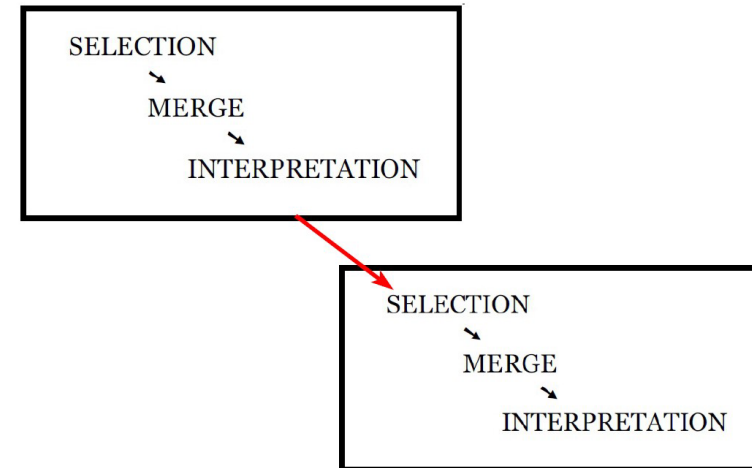
- on the one hand: there is a syntactic structure to VERBs, with syntactic processes involved (like V-to-v movement)
- on the other hand: “all verbs are to some extent phrasal idioms” (Hale & Keyser 1993:96), so a VERB is also a lexical item

Layered derivations



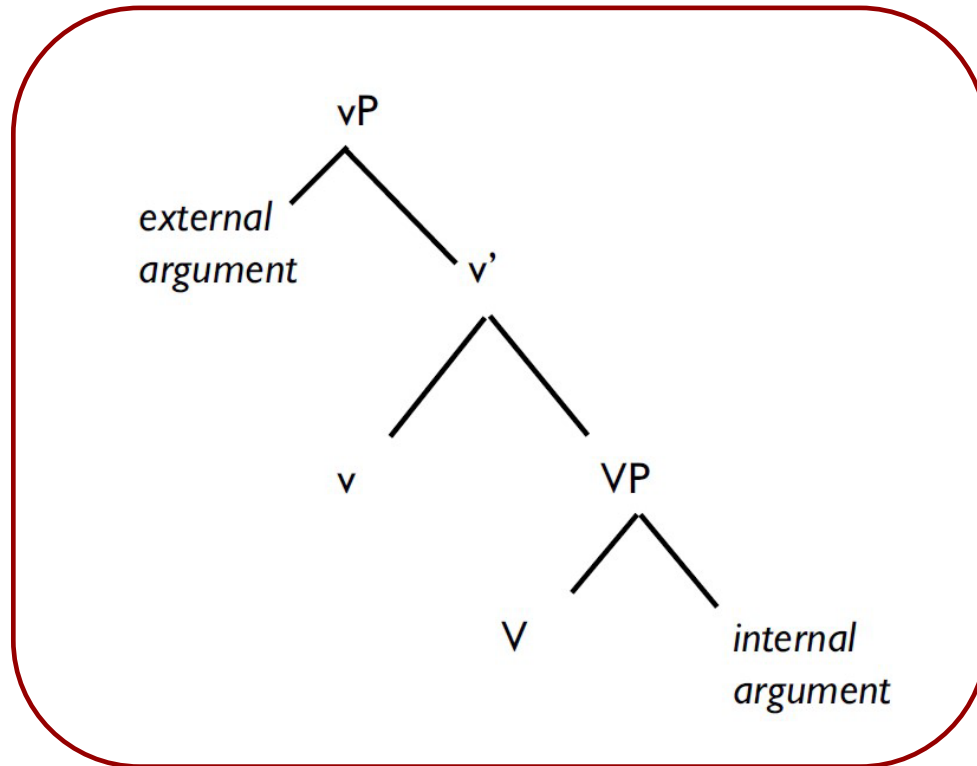
Layered derivations

- every derivation is a **network of derivations**
- what is complex in one derivation can be an **atomic** element in the next
- if atomic means ‘opaque’, we derive a very general **locality** condition



Locality: in any subderivation, you can only merge material that is in the selection (Numeration) of that subderivation.

VP-internal argument positions



← VERB = derived in a subderivation

- is then included in the next Numeration as a single atomic element
- if so, the arguments of the verb **cannot** be generated inside vP (because they would never be able to move out, by the general principle of locality)

Interim conclusion

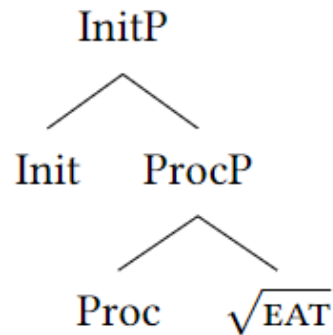
- verbs do have an argument structure
- but the arguments cannot be generated inside VP (vP, VERB)
- so: the argument structure of the verb **does not project** the syntactic structure of the clause
- and: arguments must be generated outside VP and **associated** with the verb in some way

Then how is argument structure accounted for?

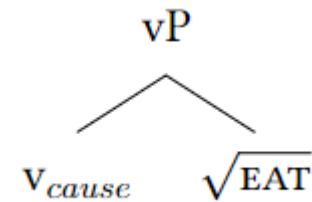
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- VERBs are internally complex, created in a separate derivation



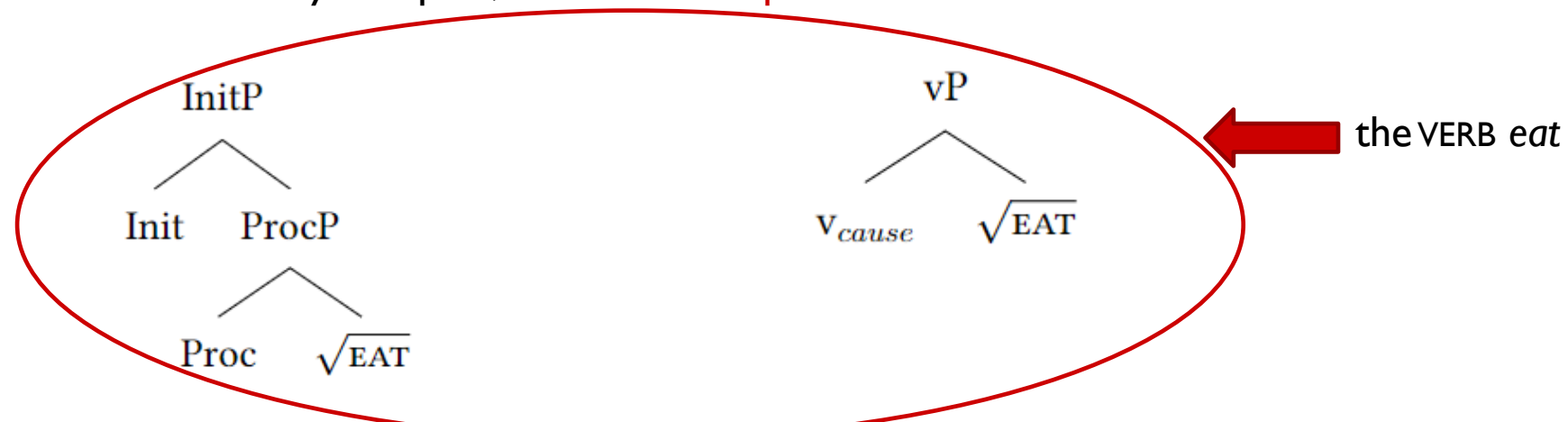
(adapted from Ramchand 2008)



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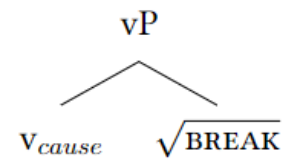
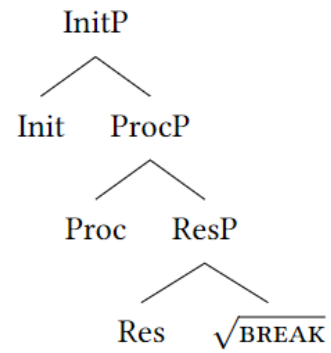


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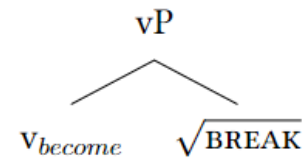
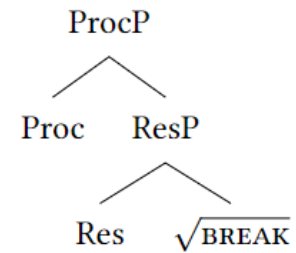
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Syntax determines argument structure

causative



inchoative (unaccusative)

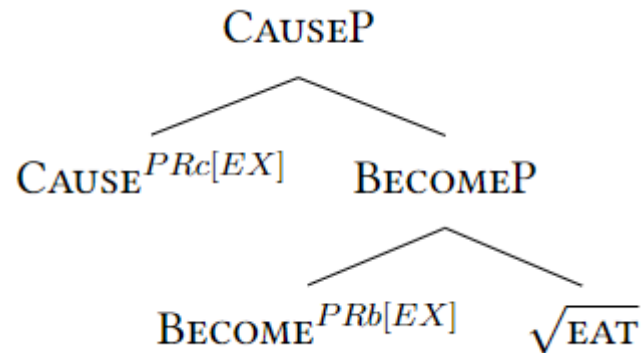


Back to (pseudo-)transitives

- my proposal:
 - 4 different types of **event structure heads**: CAUSE, BECOME, DO, BE
 - each head specifies part of the event structure
 - each head requires a participant to “take part” in the event
**expressed by an PR (Participant Requirement) feature
inherently valued as existential (EX) → generic reading
become specific when valued by an argument**
 - these heads combine with a root, which specifies the conceptual content of the
VERB

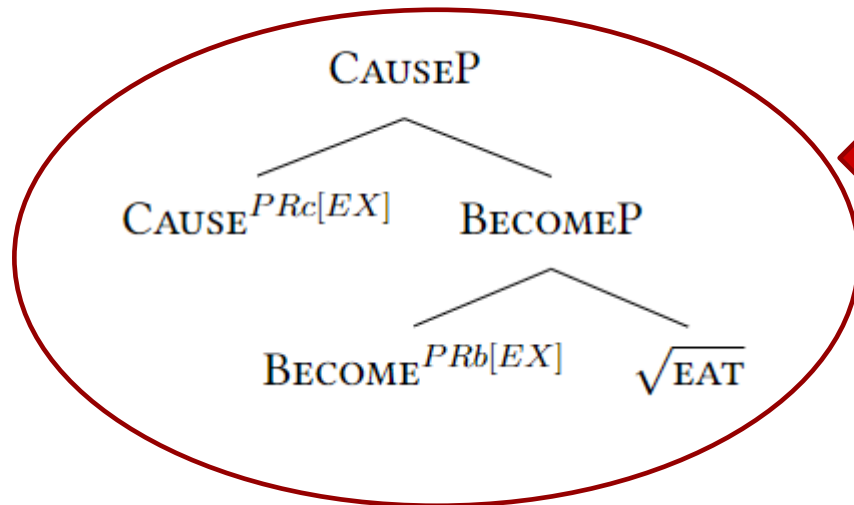
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Back to (pseudo-)transitives

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← the VERB *eat* ($[\text{eat}]^{\text{PRc}[\text{EX}], \text{PRb}[\text{EX}]}$)
x causes y to become eaten

Adding arguments to (pseudo-)transitives

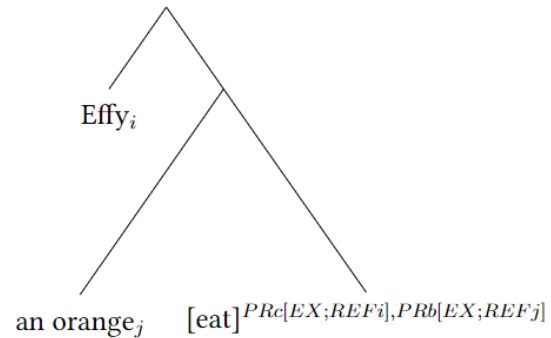
- adding arguments to a VERB (in the next derivation) further **specifies the value** of the PR features (REF)
- as a result, the argument is **interpreted** as playing a certain role in the event
- grammatical functions **follow** from Merge:
the highest argument is the subject, the lower argument is the object
- adding less arguments than there are PR features results in some PR features remaining **underspecified**

Adding arguments to (pseudo-)transitives

- the VERB *eat*: [eat]^{PRc[EX], PRb[EX]}

transitive:

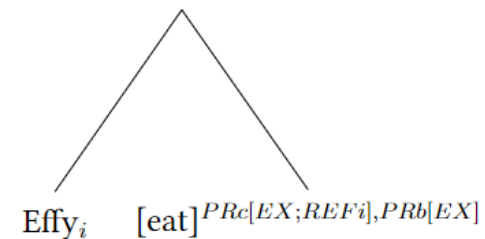
Effy eats an orange



Effy causes an orange to become eaten

intransitive:

Effy eats



Effy causes something to become eaten

Conclusion

- syntax **determines** argument structure, not the other way around
- VERBs **require** participants based on the event structure of the VERB
- this in contrast with Theta-Criterion, which placed the requirement on the arguments
- arguments are generated outside of the VERB and **value** the PR features, this gives the arguments their interpretation
- but: not adding (all the) arguments to a VERB is not ungrammatical, it yields a **generic reading**
- arguments get a grammatical function based on their **position** in the clause

What does this mean for these passages?

- “argument structure (...) serves as the basis for phrasal structure” (p. 11)
argument structure is created in/by the syntax
- “lexical-syntactic processes determine both the morphology and the position of arguments in the sentence” (p. 16)
the position of the arguments in the structure determines their interpretation
- “verb argument structure plays a crucial role in sentence formation as the verb requires a certain number of arguments to be formulated and assigns grammatical functions to these arguments” (p. 62)
*VERBs have a certain argument structure, which specifies the maximum number of arguments they can associate with, not the minimum
grammatical functions follow from Merge*

Questions?



References

Chomsky, Noam. 1981. *Lectures on government and binding: The Pisa lectures*. Berlin: De Gruyter.

Folli, Raffaella & Heidi Harley. 2005. Flavors of v: consuming results in Italian & English. In *Aspectual inquiries*, 95–120. Springer.

Hale, Ken & Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In Ken Hale & Samuel Jay Keyser (eds.), *The view from building 20: essays in linguistics in honor of Silvain Bromberger*, 53–110.

Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first-phase syntax*. Cambridge: Cambridge University Press.