Parameterization of the Obviative/Proximate Index

in Argument Structure

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0. Observation about verbs

Some verbs can present variability in the number of arguments that they instantiate syntactically, others can't.

1. The children splashed/dripped/spilled/got hot chocolate on the carpet
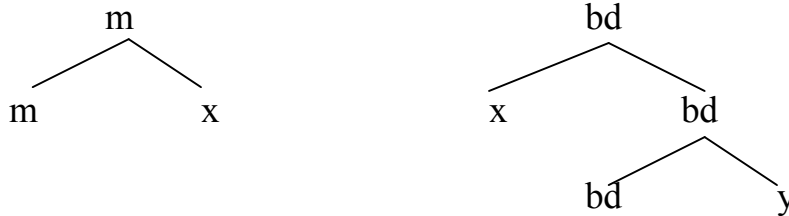2. Hot chocolate splashed/dripped/spilled/got on the carpet

"verbs of getting"

3. The children smeared/daubed/stamped/put paint on their clothes
4. * Paint smeared/daubed/stamped/put paint on their clothes

"verbs of putting"

1. Hale and Keyser's (2002) Approach: The Obviative/Proximate Index

♠ The argument structures of both "verbs of getting" and "verbs of putting" contains two segments: a monadic (m) one, and a basic dyadic (bd) one:

```
        m                          bd
       / \                        /  \
      m   x                     x     bd
                                     /  \
                                   bd    y
```

♣ Both types of verbs include as an integral part of their meaning an adverbial semantic feature that carries information concerning either the external or the internal argument. This semantic feature carrying adverbial information is represented by {i}.

♥ Relevant to H&K's analysis are the syntactic properties of {i}. It forms part of the linguistic system of *obviation*, attested in a number of languages. It should be bound by the element it is associated with. If bound by the internal argument (the closest argument), it is *proximate*; if bound by the external argument (the further argument), it is *obviative*.

♦ The syntactic properties of {i} determine the possible ways in which the two verbal segments (m and bd) are combined.

NOTE: Binding is understood as happening between an element and its c-commanding antecedent, where no other potential antecedent intervenes.
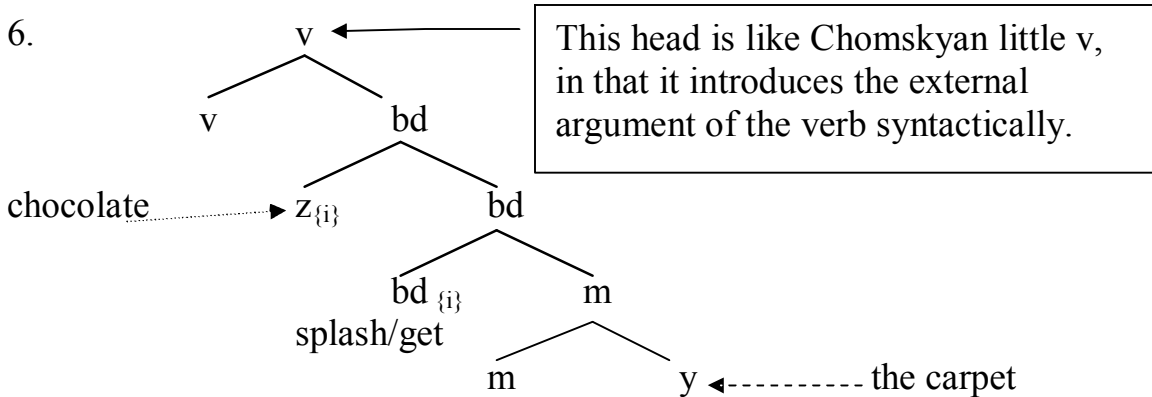
1.1. Adaptation of H&K's structures (see App. for original ones)

- In "verbs of getting", the relevant property of {i} is that it should be bound by the internal argument. The index is *proximate*.

- To create the inchoative, the m element is the complement of the bd element. The requirements of {i} are met, and the internal argument raises to subject position.
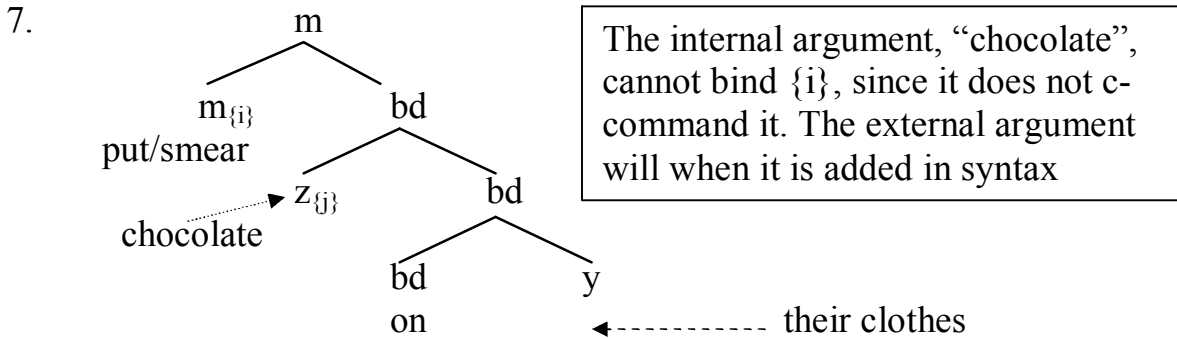
5.

The internal argument, "chocolate", can bind {i}, since it c-commands it, when it raises to subject position.
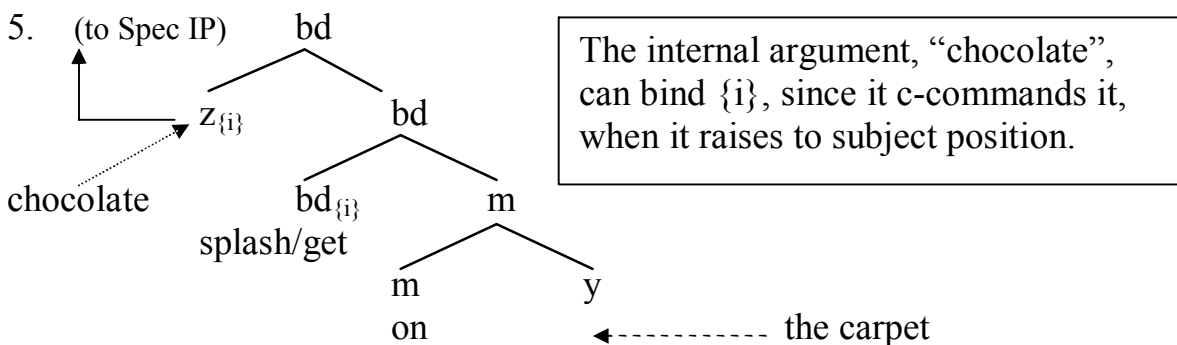
"Chocolate splashed/got on the carpet"

- In "verbs of getting", an additional head (v) introducing an external argument can be added, since it does not interfere with the internal argument binding the proximate index. Thus the transitive is created.
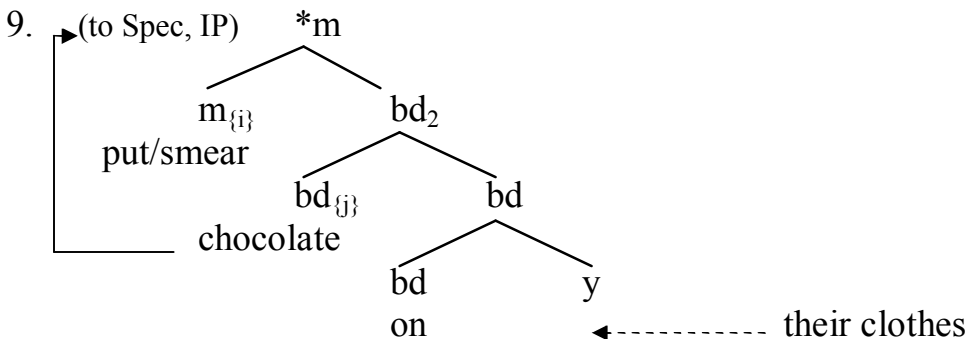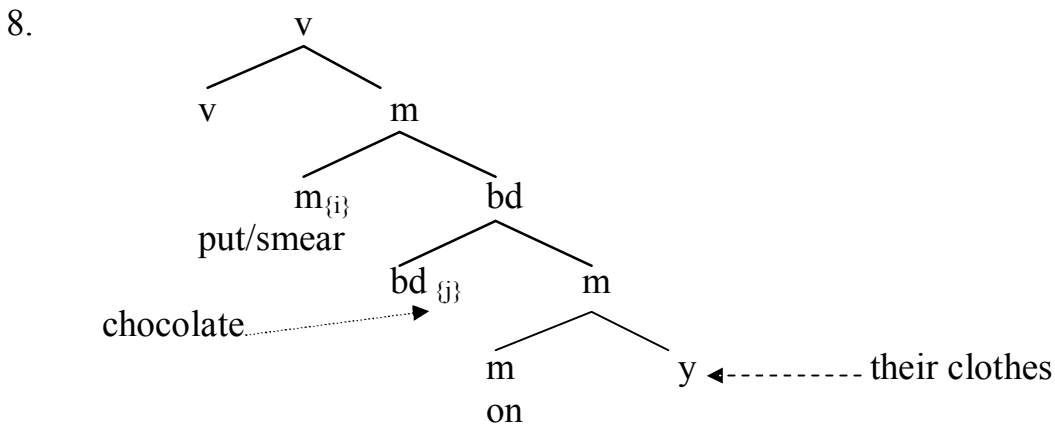
6.

This head is like Chomskyan little v, in that it introduces the external argument of the verb syntactically.

"The children splashed/got chocolate on the carpet"

- In "verbs of putting", the relevant property of {i} is that it should be bound by the external argument. [I.e., it should be bound by other than the internal argument –EJD]. The index is *obviative*.

- The bd element is the complement of the m element.

7.

$$m$$

$$m_{\{i\}} \qquad bd$$
$$\text{put/smear}$$

$$z_{\{j\}} \qquad bd$$
$$\text{chocolate}$$

$$bd \qquad y$$
$$\text{on} \qquad \text{their clothes}$$

> The internal argument, "chocolate", cannot bind {i}, since it does not c-command it. The external argument will when it is added in syntax

- In "verbs of putting", an additional head (v_1) introducing an external argument should always be added (8), since if it is not there and the internal argument raises to subject position, it will bind {i}, creating an indexation conflict (9).

8.

$$v$$

$$v \qquad m$$

$$m_{\{i\}} \qquad bd$$
$$\text{put/smear}$$

$$bd_{\{j\}} \qquad m$$
$$\text{chocolate}$$

$$m \qquad y \qquad \text{their clothes}$$
$$\text{on}$$

9. (to Spec, IP)   *m

$$m_{\{i\}} \qquad bd_2$$
$$\text{put/smear}$$

$$bd_{\{j\}} \qquad bd$$
$$\text{chocolate}$$

$$bd \qquad y$$
$$\text{on} \qquad \text{their clothes}$$

1.1. Summary

Verbs of getting -------- proximate index

Verbs of putting -------- obviative index

2. Extension 1: Deriving the typology of V (NP) PP in Spanish: Exploiting the combinatorial possibilities

€ What happens if we grant total independence from structure to {i}? That would mean that the two structural possibilities would be able to appear with both kinds of indexes, predicting the existence of four different structures:

	Obviative Index	Proximate Index
"verbs of putting"		
"verbs of getting"		

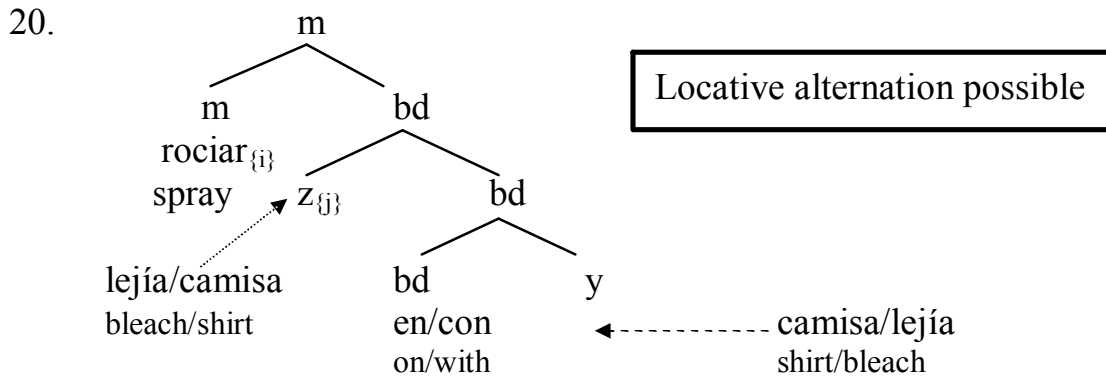## ♫ Do we find this typology? Yes (witness Spanish).

2.1. Spanish locative alternation (identical to English):

17. a. Juan roció lejía **en** la camisa
       Juan sprayed bleach on the shirt
   b. Juan roció la camisa **con** lejía
       Juan sprayed the shirt with bleach

18. a. Tobías echó agua **en** la jarra
       Tobías poured water into the jar
   b. * Tobías echó la jarra **con** agua
       Tobías poured the jar with water

19. a. * Elena llenó agua **en** el vaso
       Elena filled water in the glass
   b. Elena llenó el vaso **con** agua
       Elena filled the glass with water

☼ Previous analysis: Demonte (1991) says that the locative alternation is only possible with atelic predicates of activities, while telic predicates do not allow it. Hence, the alternation with *rociar*, "spray", which denotes an atelic process, and its impossibility with *echar*, "pour" and *llenar*, "fill", which are telic.

☼ I here present a structural account based on my version of H&K's system.

A) Structure of "putting", obviative index

20.

Locative alternation possible

m
- m: rociar$_{\{i\}}$ / spray
- bd
  - z$_{\{j\}}$: lejía/camisa / bleach/shirt
  - bd
    - bd: en/con / on/with
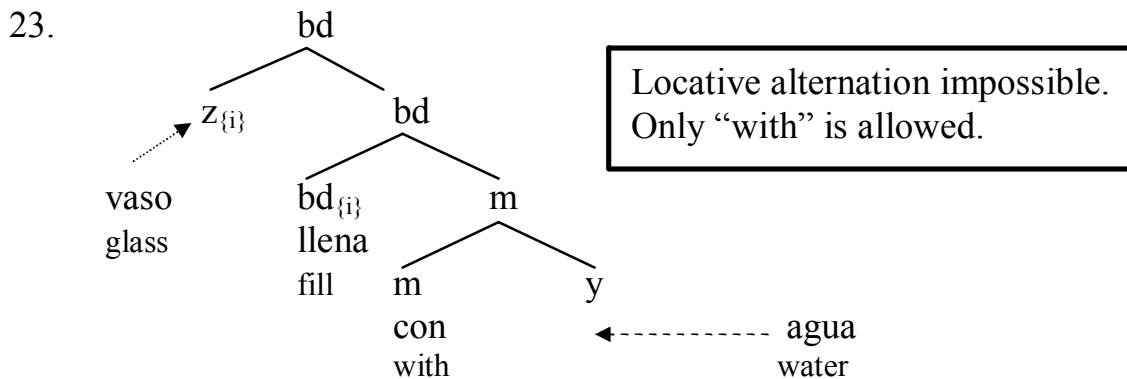   - y: camisa/lejía / shirt/bleach

♣ *Prediction: an inchoative should be impossible.*

21.* La camisa se roció con lejía
the shirt inch. sprayed with bleach

22.* La lejía se roció en la camisa
the bleach inch. sprayed on the shirt

B) Structure of getting, proximate index

23.

Locative alternation impossible.
Only "with" is allowed.

bd
- z$_{\{i\}}$: vaso / glass
- bd
  - bd$_{\{i\}}$: llena / fill
  - m
    - m: con / with
    - y: agua / water

♣ *Prediction: an inchoative should be possible*

24. El vaso se llenó con agua
The glass inch filled with water

C) Structure of getting, obviative index

25.
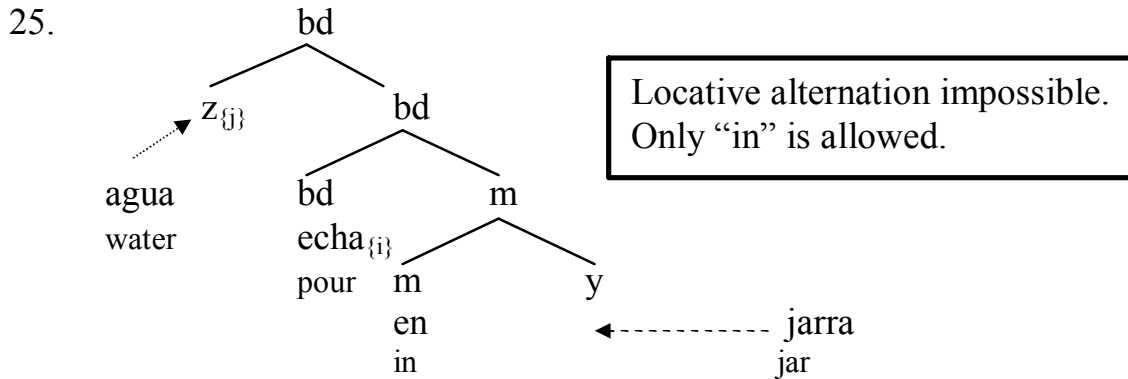
♣ *Prediction: an inchoative should be impossible*

26.* El agua se echo en la jarra
the water inch poured in the jar

♪ The story so far

	Obviative Index	Proximate Index
"verbs of putting"	rociar, "spray"	????????
"verbs of getting"	echar, "pour"	llenar, "fill"

2.2. Spanish V PP verbs

☼ Demonte (1991) (also Campos et al. 1990) shows that there are two kinds of V PP verbs in Spanish:

- One in which the P is a real preposition

27. La tesis consta de cinco partes
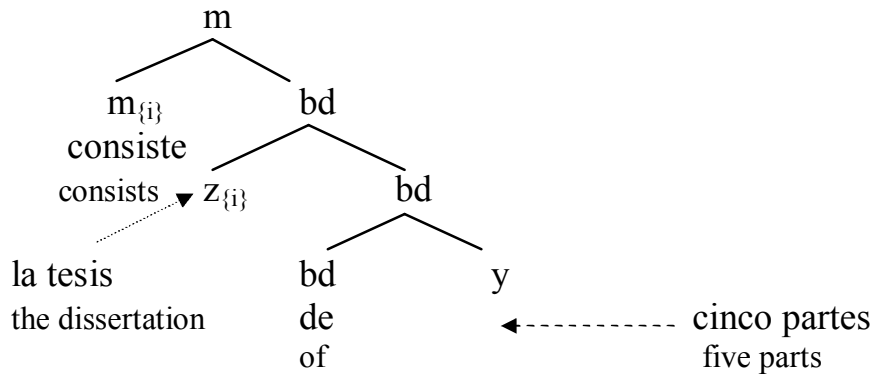The dissertation includes of five parts

- One in which the P is not a real preposition but an aspectual marker

28. Esteban abusa de la bebida
Esteban abuses of the alcohol

€ As it turns out, the first group of verbs is our missing piece:

D) Structure of putting, proximate index

29.

```
                    m
             ╱            ╲
        m_{i}              bd
      consiste        ╱         ╲
  consists ▾ z_{i}           bd
                         ╱        ╲
   la tesis           bd           y
 the dissertation     de      ◄--------- cinco partes
                      of                 five parts
```

♣ *Prediction: a transitive should be impossible*

30. * Lidia consta la tesis de cinco partes
       Lidia consists the dissertation of five parts
       (Intended: Lidia makes the dissertation consist of five parts)

2.3. Final picture

	Obviative Index	Proximate Index
"verbs of putting"	rociar, "spray"	constar, "consist on"
"verbs of getting"	echar, "pour"	llenar, "fill"

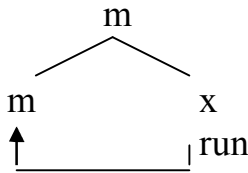# 3. Extension 2: Deriving a crosslinguistic variation between English and Italian

ITALIAN (Borer 1994):

1. a. Gianni ha corso   UNERGATIVE
       Gianni has run

   b. Gianni e corso a casa   UNACCUSATIVE
       Gianni is run to home

ENGLISH (Levin and Rappaport Hovav 1995):

2. a. Fred ran   UNERGATIVE

   b. Fred ran Alex to the emergency room   TRANSITIVE
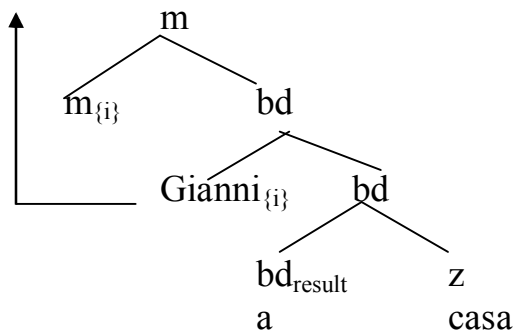
☼ Unergative structure

```
              m
            /   \
          m       x
          ↑_____| run
```

♣ Addition of a basic monadic category (a result phrase) to the unergative structure

```
              m
            /   \
          m       bd
                /   \
              DP      bd
                    /   \
              bd_result   DP
```
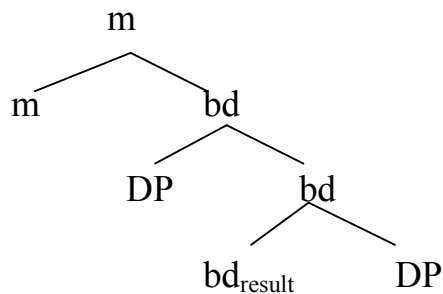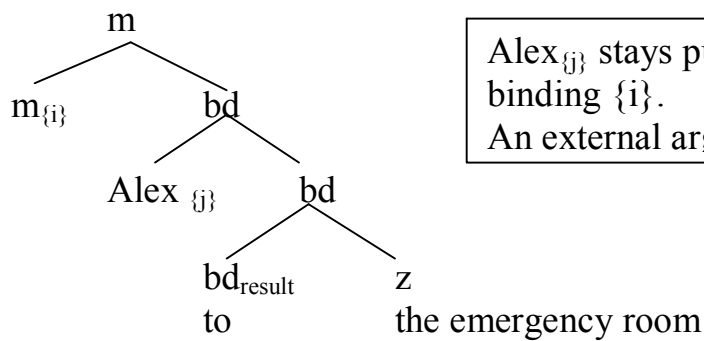
A) Italian: "expanded unergative" results in "unaccusative": Proximate index

Gianni$_{\{i\}}$ raises to sentential subject position to bind $\{i\}$, no external argument is added

B) English: "expanded unergative" results in "transitive": Obviative index

Alex$_{\{j\}}$ stays put to avoid binding $\{i\}$.
An external argument is added

4. Conclusion

A system in the lines of Hale and Keyser's (2002) approach, with the addition of the manner component index, now derives two important typologies, one found within a single language (Spanish in our examples), and one differentiating between two languages (Italian and English).
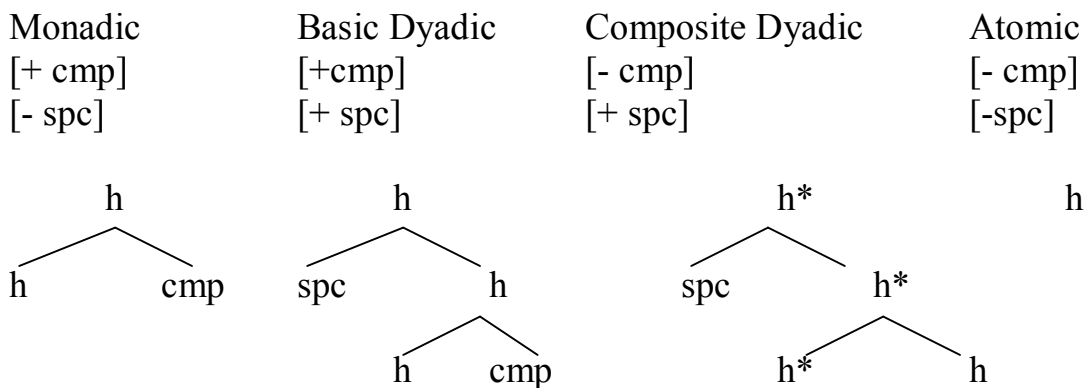
Given the explanatory power of the obviative/proximate index, we conclude that it is a welcome addition to the theory.

References

Borer, Hagit (1994): The Projection of Arguments. In E. Benedicto and J. Runner (eds): *Functional Projections*. UMass Occasional Papers in Linguistics 17, GLSA, UMass, Amherst.

Campos, H., M. Charnitski and W. Woodard (1990): Silent prepositional phrases in Spanish. *The Georgetown Journal of Languages and Linguistics*, 1:1. 13-24.

Demonte, Violeta (1991a): Linking and Case: the case of Prepositional Verbs. In T. Morgan and Ch. Laeufer, eds: *Theoretical analyses in comptemporary Romance Linguistics*. Amsterdam: John Benjamins. 413-450.

Hale, Ken and Jay Keyser (2002): *Prolegomenon to a Theory of Argument Structure*. MIT Press.

Levin, Beth and Malka Rappaport Hovav (1995): *Unaccusativity*. LI Monographs, MIT Press.

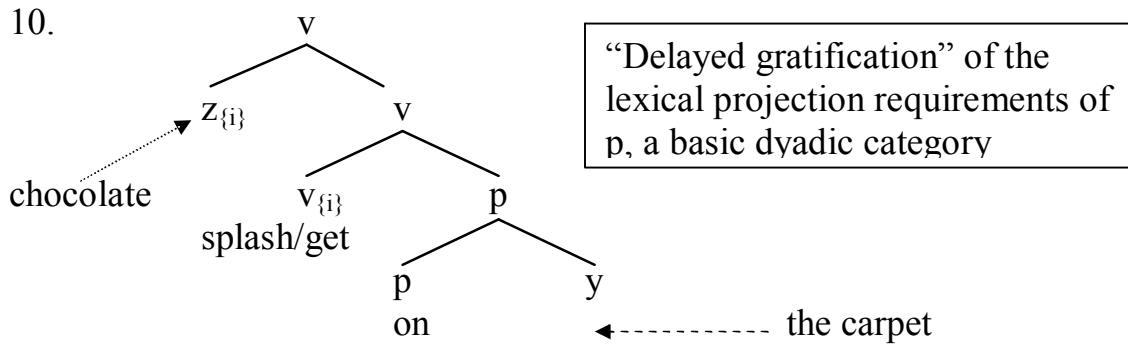# Appendix: the Truth about Hale and Keyser's Analysis

- The restrictions on possible argument structures in are due to structural properties constraining the building of those argument structures

- H&K question the tradition/assumption that the syntactic properties of lexical items are in large measure predictable from their meaning.

- In their view, UG specifies not word meanings themselves (including theta roles or any other features used by lexical semanticists), but rather principles constraining the construction of those meanings.

- The lexical categories are defined according to two primitive structural relations: complement and specifier [sisterhood and adjunction]

Monadic	Basic Dyadic	Composite Dyadic	Atomic
[+ cmp]	[+cmp]	[- cmp]	[- cmp]
[- spc]	[+ spc]	[+ spc]	[-spc]

```
       h                h                    h*                h
      / \              / \                  /  \
     h   cmp        spc   h              spc    h*
                         / \                   /  \
                        h   cmp             h*     h
```

- All the possible argument structures are formed by combinatorial merging of these primitive structural lexical categories.

- There are "default mechanisms" which map these structures to specific lexicosyntactic categories (Monadic to Verb, Basic Dyadic to P, etc. in English). These default mechanisms are a site for crosslinguistic variation.

- A new element is added to the theory: obviative/proximate indices, also called "manner indices". (It might seem that manner indices are more semanticky in nature, but in H&K they are treated just for their syntactic properties.)

Original structures for "verbs of getting" and "verbs of putting" in H&K

a) Verbs of getting

10.

v

$z_{\{i\}}$ v

chocolate

$v_{\{i\}}$ p
splash/get

p y
on   the carpet

> "Delayed gratification" of the lexical projection requirements of p, a basic dyadic category

"Chocolate splashed/got on the carpet"

b) Verbs of putting

11.

v

$v_{\{i\}}$ p
put/smear

$z_{\{j\}}$ p

chocolate

p y
on   their clothes

> "Immediate satisfaction" of the lexical projection requirements of p, a basic dyadic category