# Appositions and layered derivations

# Jan-Wouter Zwart

University of Groningen

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#### 1. Layered derivations

# 1.1 Merge

- (1) Minimally needed
  - a. a set of elements N (Numeration)
  - b. a procedure yielding relations among the members of N = structure (Merge)
- (2) Simplest merge (Zwart 2004, 2008, 2009; Fortuny 2008) a. Top-down: split b. Bottom-up: transfer

N = { a, b, c }	N = { a, b, c }	
N	N N	workspace
$\langle \mathbf{a}, \{\mathbf{b}, \mathbf{c}\} \rangle$	> {a, b, c } {b, c }	∞ 〈a.∞〉
$\langle a, \langle b, \langle c, \{\} \rangle \rangle$	{ c }	$\langle \mathbf{b}, \langle \mathbf{a}, \boldsymbol{\varnothing} \rangle \rangle$
> 〈 a, b, c 〉	{ }	⟨ C, ⟨ D, ⟨ a, ∅ ⟩/⟩
	$>$ $\langle$ c, b, a $\rangle$	

- (3) Unary merge
  - a. each step creates an ordered pair
  - b. derivation yields an ordered n-tuple
- (4) Linear Correspondence Axiom (redefined)
   ⟨ a, b ⟩ = / a b / (where slashes indicate a string)

#### (5) Structure and order

- a. Structure in any domain (syntax, morphology) is always a function of Merge
- b. Order is always established at the interfaces

#### 1.2 Layered derivations

#### (6) Starting point

Members of N may be of any type (features, morphemes, words, phrases, clauses) e.g. Dutch *vader en moeder-tje* [father and mother-DIM] 'playing house'



- (8) (complex) specifiers/adjuncts must stem from a separate derivation layer
- a. N = { the, man, hit, the, ball } > < < the, { man, hit, the, ball } > 
  b. N = { [the man], hit, the, ball } > < < [the man], hit, the, ball } >
- (9) Recursion
   A derivation D, containing subderivations (D<sub>i</sub>, D<sub>k</sub>) with numerations (N<sub>i</sub>, N<sub>k</sub>), is recursive iff a member of N<sub>i</sub> is the output of D<sub>k</sub>.

# 1.3 What happens between derivation layers



- (11) Interface effects between derivation layers
  - atomization: given a derivation D<sub>i</sub> with numeration N<sub>i</sub>, parts of members of N<sub>i</sub> are not merged in D<sub>i</sub> (Generalized Integrity)
  - b. **linearization**: conversion of structure (ordered N-tuple) to linear order (string) (Zwart 2009)
  - c. conventionalization: idiosyncratic sound/meaning pairing (e.g. idioms)
  - d. grammaticalization/recategorization/reanalysis
  - e. morphological realization of dependency ('morphology after syntax')
  - f. prosodic effects
- (12) Generalization

The interfaces turn the output of a derivation into a single item ('lexical item'), which

- a. potentially has idiosyncratic properties, and
- b. may be used as an atom in another derivation.
- (13) 'Lexical'
  - a.  $\alpha$  is a **lexical item** iff  $\alpha$  is a member of a numeration
  - b. P is a lexical property iff P is a property of a lexical item
  - c. a construction is a lexical item

1.4	Opacity	
(14)	Left branch extraction a. Whose father did you say [ [e] left ] ? b. * Whose did you say [ [ [e] father ] left ] ?	
(15)	Whose father left	
a.	$N \neq \{ whose, father, left \} > \langle whose \langle father \langle left \rangle \rangle \rangle $ (cf. (8))	
b.	N = { [whose father], left } > $\langle$ [whose father] $\langle$ left $\rangle \rangle$	
(16)	<ul> <li>a. whose father in (14/15) is a lexical item in N</li> <li>b. opacity follows from Lexical Integrity, now generalized (17)</li> </ul>	
(17)	Generalized Integrity Given a derivation D of a Numeration N, operations in D manipulate only members of N.	
(18) a. b.	<i>Transparency</i> He said [ that Tasman found Tasmania ] <b>What</b> did he say [ Tasman found <b>[e]</b> ] ]	
(19)	<ul><li>a. phase-theory: (18b) should be bad &gt; edge-hypothesis</li><li>b. layered derivations: complement need not be output of separate derivation</li></ul>	
(20)	N = { he, said, that, Tasman, found, Tasmania }	
	$\langle$ he, $\langle$ said, $\langle$ that, $\langle$ Tasman, $\langle$ found, Tasmania $\rangle\rangle\rangle\rangle\rangle$	
(21)	<ul><li>a. [That Tasman found Tasmania] surprised Cook</li><li>b. Cook found the Cook Islands [before Tasman found Tasmania]</li></ul>	
(22)	<ul> <li>a. *What did [ that Tasman found [e] ] surprise Cook</li> <li>b. *What did Cook find the Cook Islands [ before Tasman found [e] ]</li> </ul>	
	> adjuncts/subjects <b>must</b> be outputs of separate derivation layers (cf. (8))	
1.5	Reanalysis as an interface effect	
(23) (24)	<ul><li>a. far from simple (adjective)</li><li>b. far from home (PP)</li><li>a. a far from simple solution</li><li>b. *a far from home cowboy</li></ul>	
(25)	Reanalysis: PP > A	
(26)	$\begin{array}{llllllllllllllllllllllllllllllllllll$	

(27) Derivation<sub>2</sub> N = { a, [far from simple]<sub>A</sub>, solution } >  $\langle$  a, [far from simple], solution  $\rangle$ 

#### 2. Appositions

(28) Abel Tasman, the famous explorer, found Tasmania

# 2.1 Atomicity

- (29) a. Abel Tasman himself found Tasmaniab. Abel Tasman didn't himself find Tasmania
- (30) a. Abel Tasman, the famous explorer didn't find the South Land
   b. \*Abel Tasman didn't the famous explorer find the South Land
- > **anchor** and *apposition* are a (complex) unit
- > in subject/adjunct position: they must be outputs of separate derivations
- > in object position?

# 2.2 Opacity

- (31) a. The VOC ordered Tasman to find the South Land, a nonexisting continent
  - b. What did the VOC order Tasman to find [e]
  - c. \*What did the VOC order Tasman to find [e] a nonexisting continent
- > anchor + apposition in object position is also the output of a separate derivation

#### 2.3 Interface effects

- (32) a. atomization: 2.1/2.2
  - b. linearization: fixed order
  - c. conventionalization: identification/attribution/specification?
  - d. grammaticalization/reanalysis: noun phrase juxtaposition > NP + proposition
  - e. morphological realization (apposition markers?)
  - f. prosody: "comma intonation", more tellingly: echo intonation

(33) A<sup>2</sup>-bel<sup>1</sup> Tas<sup>3</sup>-man<sup>2</sup>, the<sup>1</sup> fa<sup>2</sup>-mous<sup>1</sup> ex<sup>1</sup>-plo<sup>3</sup>-rer<sup>2</sup>, vas<sup>2</sup> born<sup>3</sup> in<sup>2</sup> Lut<sup>4</sup>-je<sup>1</sup>-gast<sup>1</sup>

#### 2.4 Heringa's observations (chapter 4)

Apposition does not affect verbal agreement

- (34) Every explorer, Cook, Tasman, Lewis & Clark, { was/\*were } hesitant
  - > reanalysis NP + NP = NP

Apposition ignored in ellipsis interpretation

(35) Cook lost **his ship**, *the Endeavour*, and so did Tasman

> same reanalysis

Apposition is not in a selection relation with anything outside the appositive construction

- (36) a. The VOC ordered Tasman to find the South Land, a nonexisting continent
  - b. The VOC ordered Tasman to find a nonexisting continent
  - > (36b) is *de re* only, (36a) can be *de dicto* as well

Apposition is shielded off from dependencies originating outside the appositive construction (37) a. \* Tasman named the island after Tasman's superior

- b. Tasman named the island after **Van Diemen**, *Tasman's superior*
- > again follows from the reanalysis at the interface between derivation layers

#### 2.5 The propositional analysis of appositions

Already in Wobbe de Vries (1914-1915), De typen der mededeeling, p. 180-181:

in 'Harke, een beste kerel, had er geen erg in' is de appos. ampl., neerkomend op 'hij was een b. k.' (evengoed als 'die een b. k. was' daarop neerkomt).

> we see an NP, we interpret a proposition: could this be an interface effect? (for example, E-type pronoun not merged, but supplied at the interface)

# 3. Tense and appositional opacity

- (38) a. **Marianne Vos**, *winnaar van de Giro Donne*, heeft in Haren gereden Marianne Vos, winner of the Giro Donne, has in Haren ride:PART
  - b. \*Wie heeft [e] winnaar van de Giro Donne in Haren gereden ?
- (39) a. **Marianne Vos**, *ooit winnaar van de Giro Donne*, heeft in [nu] Haren gereden Marianne Vos, winner of the Giro Donne, has [now] in Haren ride:PART
  - b. Wie heeft [e] ooit winnaar van de Giro Donne [nu] in Haren gereden ?

#### Not in object position, except with ECM

- (40) a. Ik heb **Marianne Vos** *(ooit) winnaar van de Giro Donne*, [nu] in Haren gezien I have see:PART
  - b. \*Wie heb je (ooit) winnaar van de Giro Donne, [nu] in Haren gezien ?
- (41) a. Ik heb **Marianne Vos** *(ooit) winnaar van de Giro Donne*, [nu] in Haren zien winnen I have see win
  - b. Wie heb je \*(ooit) winnaar van de Giro Donne, [nu] in Haren zien winnen?
- > facts suggest that appositions with a temporal marker are different, perhaps joined to a different type of anchor
- > possible consequence: tense is not a canonical property of appositions