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Portmanteaus as Generalized Templates

Main Claim We argue that portmanteaus are an instance of a prosodic word template and therefore fill a gap in the typology of possible prosodic templates.

1. Introduction

1.1. Spanish Portmanteaus

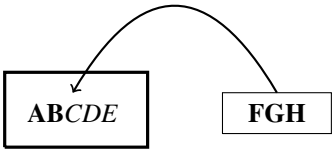
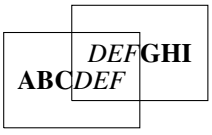
Portmanteaus: the integration of two source words into the prosodic structure of one of them (the head of the construction).

(e.g. Algeo 1977, Kubozono (1990), Bertinetto (2001), Piñeros (2000), Piñeros (2002) or Lopez Rua (2004))

Portmanteaus as one Type of Blends: "various types of word creation that result from combining two or more words, at least one of which is shortened in the process of splicing them together"

(Piñeros, 2002, 2)

⇒ Two general types of blends:

Portmanteaus	**(Telescopes)**
• the integration of two source words into the prosodic structure of one of them • the portmanteau preserves the prosodic structure of the head and all segmental material of the non-head	• conflation of two juxtaposed source forms resulting in shortening at the word peripheries that are in contact
e.g. Spanish [tìrardót] from /tirár/ and /xì.rar.dót/, (Piñeros, 2002, 27)	e.g. Spanish [kwernasjonales] from /kwernos/ and /nasjonales/, (Piñeros, 2002, 5)
	

(1) *Portmanteaus in Spanish* Piñeros (2000), Piñeros (2002)

ladrón	makdónals	ladrónals
'thief'	'McDonalds'	'McDonalds as a rip-off
pánsa	sàntaklós	pànsaklós
'belly'	'Santa Clause'	'potbellied Santa Clause'
dédo	dèmokrásja	dèdokrásja
'finger'	'democracy'	'a system of election by pointing with the finger'
pèrsonàlidád	péčo	pèčonàlidád
'personality'	'breast'	'the personality of a woman with the implication that her breasts are an important part of it'

Generalizations:
(cf. analysis in Piñeros (2000), Piñeros (2002)):

1. the prosodic structure of the head of the construction is preserved
2. all the segmental elements of the non-head are realized
   ⇒ the segmental material of both source words is integrated under the prosodic structure of the head and the segments of the non-head overwrite segmental material of the head

➨ Portmanteaus are the result of merging two words under a Prosodic Word Template

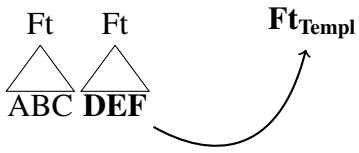
- **Standard Prosodic Morphology (Mc Carthy and Prince, 1986/1996)**:
  Templatic morphology such as truncation follows from affixing prosodic feet or syllables
  cf. truncation in 2.1.
- This also predicts **prosodic words as templates** under the assumption that all elements in the prosodic hierarchy are possible (morphological) templates

Analysis

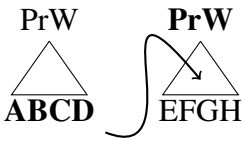
A. In templatic morphology all material in a morphological complex word must be dominated by head-prosody

B. faithfulness constraints preserve prosodic structure: prosodic nodes itself as well as the association lines between them

Truncation: segmental material is mapped unto a template, e.g. a foot:



Portmanteau Formation: segmental material of two words is mapped unto the (invariant) prosodic structure of one of them:



*1.2. Background assumption: Coloured Containment van Oostendorp (2006*a*)*

(2) *Morphological Colours*
e.g. van Oostendorp (2006*a*,*b*)
Every morpheme has its own specific colour[1] that allows to identify all elements belonging to this morpheme.

(3) *Containment* Prince and Smolensky (1993)
Every element of the phonological input representation is contained in the output.

- nothing can be literally deleted in containment – but it can be marked as phonetically "invisible", i.e. not integrated under the highest prosodic node under violation of (4-a)
- inserted elements lack any morphological colour since they do not belong to any morpheme (4-b)

(4) *Faithfulness constraints in coloured containment* (van Oostendorp, 2006*a*, 40)

a. PARSE$_{\phi(\alpha)}$ ⇒MAX
The morphological element α must be incorporated into the phonological structure.
= *Assign a violation mark for every morphologically coloured element that is not phonetically realized.*

b. PARSE$_{\mu(\alpha)}$ ⇒DEP
The phonological element α must be incorporated into the morphological structure.
= *Assign a violation mark for every colourless element.*

[1] In the following represented by indices.

- we assume a concept of faithfulness to association lines as well [2]

(5) IDENT-AL_{XY}
Assign a violation mark for every instance of two morphologically coloured elements X Y that are:
a. related to each other with a colourless (=inserted) association line or
b. related to each other with a phonetically unrealized (=deleted) association line.

2. Portmanteaus as Word-Templates

2.1. An Example for Templatic Morphology: Truncation

- our proposal is couched within the tradition of Prosodic Morphology (Mc Carthy and Prince (1986/1996)): prosodic nodes as morphemes

- a classical example for an effect of Prosodic Morphology is truncatory morphology as in English short name formation (6)

(6) *Truncated names in English* (Lappe, 2006, 11)

Alfreda	Alf
Camille	Cam
Elizabeth	Liz
Marvin	Marv

- truncatory morphology is indeed regular word formation, e.g. monosyllabic truncated names in English

- a syllable template is affixed

- it must be realized – integrated into the prosodic structure – due to REALIZE MORPHEME (7), this excludes candidates with a floating syllable template (9-a)

(7) REALIZE MORPHEME:
Assign a violation mark for every morphological colour that is only present on phonetically unrealized elements.

- this templatic affix is the head of the morphological construction (cf. e.g. Di Sciullo and Williams (1987))

- the constraint (8) ensures that segmental material must be dominated by head material, excluding candidate (9-b)

[2] Van Oostendorp himself concludes that "also association lines needs to be preserved from the input to the output" (van Oostendorp, 2006*a*, 107). One strategy to implement faithfulness to association lines would be the assumption of Turbidity Theory (Goldrick, 2001).

(8) HDDOM:
Assign a violation if there is at least one phonetically realized segment that is not dominated by the highest prosodic head-node[3].

- since MAX_S is ranked under HDDOM and the template is "too small" to integrate all segmental material, some is left unrealized in the winning candidate (9-d)

(9) *Truncated names*[4]

	RM	HDDOM	MAX_S	MAX_σ
PrWd_i, Ft_i, σ_m σ_i σ_i, $\mu_\text{i}\ \mu_\text{i}$ $\mu_\text{i}\ \mu_\text{i}$, $\text{m}_\text{i}\ \text{a}_\text{i}\ \text{r}_\text{i}\ \text{v}_\text{i}\ \text{i}_\text{i}\ \text{n}_\text{i}$				
a. [marvin]	*!			*
b. [marvin]		*!		*
c. [mar]			***!	**
☞ d. [marv]			**	**

[3]"prosodic head-node" – a prosodic node that is morphologically affiliated with the head of the morphological construction.

[4]In the following, boldfaced elements (segments, association lines) are inserted/colourless and dotted association lines are morphologically coloured but phonetically unrealized.

2.2. Portmanteaus

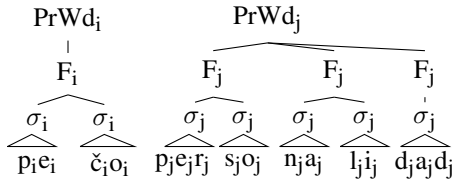
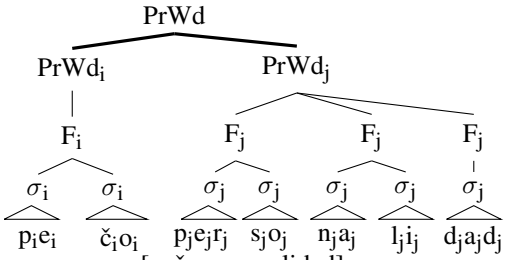
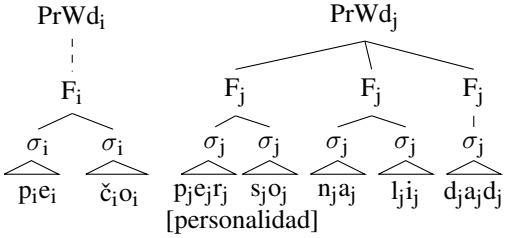
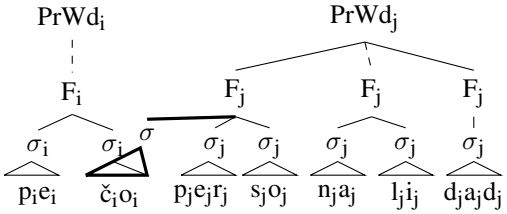
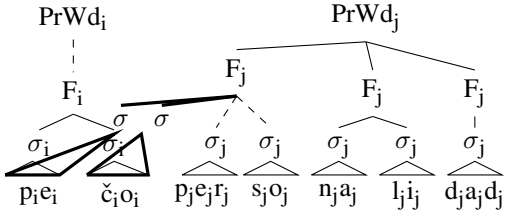
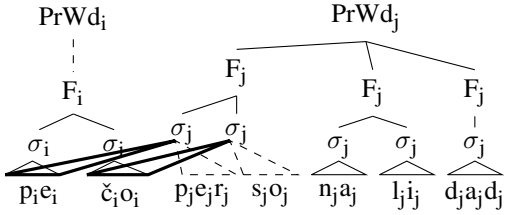
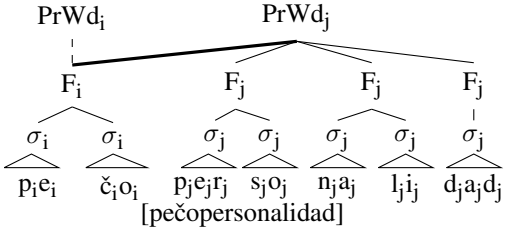
- we have established that all segmental material of the non-head must be realized in the portmanteau (overwriting material of the head) – this follows from a faithfulness constraint parametrized to the head/non-head status of segmental material (10)

(10) $\textsc{Max}_{\textsc{SNonHd}}$:
Assign a violation mark for every morphologically coloured segment of the non-head (daughter of the morphological root node) that is not phonetically realized.

Derivation (11)

- both source words enter the derivation with a complete prosodic structure (assigned in an earlier stratum)
- in a portmanteau (below: *pèrsonàlidád*), one of the two source words is the head of the construction
- HDDOM is active and forces all material to be dominated by head-prosody, i.e. the highest prosodic node of *pèrsonàlidád*
- a candidate (11-a) that simply concatenates both source words under another (inserted) prosodic word node is excluded by HDDOM
- HDDOM could be satisfied if the non-head remains unrealized as in (11-b) – this is excluded by $\textsc{Max}_{\textsc{SNonHd}}$ (and RM as well)
- partial deletion (11-c) of the non-head satisfies RM but is nevertheless excluded by $\textsc{Max}_{\textsc{SNonHd}}$
- candidates (11-c,d) both realize all non-head material and integrate it under prosodic head-material
- (11-d) wins over (11-c) since it avoids insertion of epenthetic syllables
- a faithfulness constraint penalizing a new association relation between prosodic words and feet ($\textsc{Ident-AL}_{\textsc{PrWd Ft}}$ (=$\textsc{Id}_{\textsc{P-F}}$), cf. (5)) excludes a candidate (11-f) that integrates all feet under the head-prosodic word node

(11) *Portmanteaus*

		IDP-F	MAXSNHd	HDDOM	DEPσ	MAXS
						
a.	 [pečopersonalidad]			*!		
b.	 [personalidad]		*!***		**	****
c.	 [čopersonalidad]		*!*		*	**
d.	 [pečonalidad]				*!*	*****
☞ e.	 [pečonalidad]					****
f.	 [pečopersonalidad]	*!				

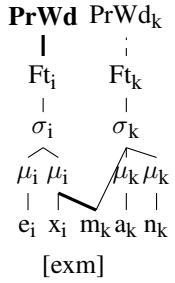
2.3. A Misprediction?

What about affixation of a segmental affix?

- if an affix is the head of the construction and this affix is dominated by prosodic structure with its own morphological colour,
- if HDDOM is active in a language and therefore all material strives to be dominated by this prosodic material
- and if epenthesis of prosodic material is excluded
  (as in the ranking for the truncation pattern in (9)

⇒ Doesn't the theory predict truncation of all stem material that is "too much" to be integrated under the affix' prosody?
e.g. Dutch: if the affix *ex* with its own prosodic structure attaches to a stem like *man*[5], isn't a structure as in (12) predicted only realizing segmental material that is dominated by affix-prosody?

(12)



Solution:

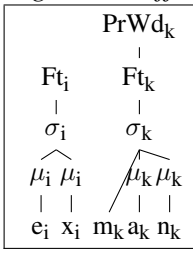
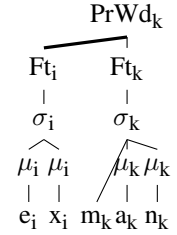
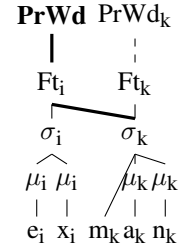
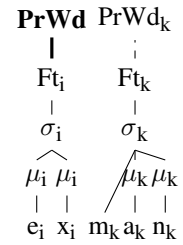
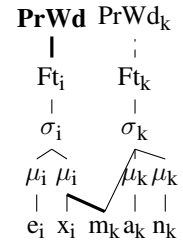
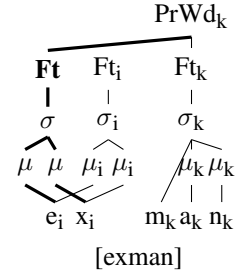
- the constraint SEG$_{LEX}$ ⟶ PROS$_{LEX}$ in (13) excludes a situation in which a lexical morpheme (=stem) is dominated by prosodic material belonging to a functional morpheme (=affix)

(13) SEG$_{LEX}$ ⟶ PROS$_{LEX}$: *Pros$_{Non\text{-}Lex}$ / Seg$_{Lex}$
Assign a violation mark for every lexical segment that is not dominated exclusively by prosodic lexical material.

- if SEG$_{LEX}$ ⟶ PROS$_{LEX}$ is ranked high, it is impossible for a stem to satisfy HDDOM, i.e. to be dominated by head-prosody
- and if this violation of HDDOM is unavoidable and MAX$_S$ and RM force realization of the stem, prosodic material of both stem and affix is integrated under a new prosodic word node as in candidate (14)a

[5] Booij (2002).

(14) *Segmental affixation*

	IDP-F	RM	*ProsNon-Lex / SegLex	HDDOM	MAXS	MAXσ
a.  [exman]	*!			*		
b.  [exman]			*!**			
c.  [ex]		*!			***	*
d.  [exm]			*!		**	*
☞ e.  [exman]				*		*

3. Summary

- we argued that blending is a predicted word-template effect in a theory assuming prosodic categories as morphological templates
- the derivation of blending in our theory followed from the constraint HDDOM that in addition predicted instances of truncatory morphology and from the constraint LEXINT
- the constraint HDDOM derives the cross-linguistic generalization that only lexical stems but never affixes can serve as a template: only heads can "overwrite" prosodic structure of a non-head

4. Appendix

4.1. A Note on Telescopes

We assume that telescopes are an OCP-effect between two combined words, e.g.

(15) OCP_{Ons}:
Assign a violation mark for every onset that is identical to a preceding onset.

They therefore follow from a quite different mechanism than portmanteaus.

4.2. OT-alternatives I: Bat-El (1996)

- analyzes Hebrew blends that are instances of telescopes
- most important observation for her analysis:

  one consonant that both source word have in common: *"Designated identical segment"*

- DIS as "cut-point": all material between the two occurrences of this DIS is deleted
- deletion triggered by constraint DISC (talking explicitly about Designated identical segments) (16).

(16) DESIGNATED IDENTICAL SEGMENT CONSTRAINT
(Bat-El, 1996, 235) If there is a consonant α that appears in both stems of the base of the blend, then there must be unparsed segmental material such that
  a. one occurrence of α is the last (first) parsed segment before (after) the unparsed string and
  b. the other occurrence of α is the last (first) unparsed segment in the unparsed string.

- the telescopes are at least as long as the longer source word (but longer in most cases): this is ensured through templatic constraints restricting the size of a blend (17)

(17) *Templatic constraints* (Bat-El, 1996, 237)

a. *TEMP(<): *$\text{Temp}^{B} < \text{Temp}^{LS}$
(The syllabic template of the blend must not be smaller than that of the longer stem.)

b. *TEMP(=): *$\text{Temp}^{B} = \text{Temp}^{LS}$
(The syllabic template of the blend must be identical to that of the longer stem.)

➨ explicit constraints for the blend construction that are actual descriptions of the process of blend-formation

4.3. OT-alternatives II: Piñeros (2002)

(core idea is identical to the analysis in Piñeros (2002))

- the ALIGN-constraint (18) forces the two source words to have one identical edge
- the MAX-constraints (19) ensure the asymmetry: head prosody is preserved and non-head segments

(18) ALIGN-MWD:
Align edge x of MWd_1 with the corresponding edge of MWd_2.

(19) *Faithfulness constraints* (Piñeros, 2002, 23)

a. MAX(PROS)HD:
Every prosodic unit in the head source word must have a correspondent in the portmanteau.

b. MAX(SEG)N-HD:
Every segment in the non-head source word must have a correspondent in the portmanteau.

➨ the constraints in (18)/(19) are not "principles found in natural languages" (Piñeros, 2002, 23), they are limited to the extragrammatical morphology
➨ and actually the additional machinery of ALIGN-MWD is unnecessary: if faithfulness to the segmental material of the non-head and to the prosodic structure of the non-head is forced, "overwriting" results automatically

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