

On Portmanteau Agreement

Jochen Trommer
University of Leipzig

<http://www.ling.uni-leipzig.de/~jtrommer>
jtrommer@uni-leipzig.de

Core Mechanisms of Exponence: 2nd Network Meeting

February 10, 2008

Portmanteau Agreement

Two (Agreement) Heads (morphological slots)

are expressed

by the same affix (vocabulary item)

Claim

Portmanteau Agreement

=

Zero Morphology + Contextual Allomorphy

Distributed Morphology (Halle & Marantz, 1993)

- ▶ Syntax manipulates abstract heads without phonological content
- ▶ Morphology interprets the output of Syntax
- ▶ Many types of morphological operations
 - ▶ **Impoverishment:** deletes morphosyntactic features
 - ▶ **Fission:** dissect one head into different separate heads
 - ▶ **Fusion:** fuses different lexical items into one
 - ▶ **Vocabulary Insertion:** inserts VIs into lexical items, restricted by Elsewhere Condition and Feature Hierarchies

Minimalist Distributed Morphology (Trommer, 1999, 2003a,b)

Only 1 Morphological Operation: Vocabulary Insertion

Vocabulary insertion: If M is a VI with syntactic features α and phonological features β , and S is a head with features γ , where α is a subset of γ , then delete the features of α in γ and add β to the phonological representation of S

Fission & Impoverishment in Minimalist DM

Fission is Multiple Insertion

- ▶ Multiple Insertion obviates fission
- ▶ Fission is only restricted by obligatory feature consumption
- ▶ Standard Case: Feature deletion blocks fission

Impoverishment is Zero Insertion:

- ▶ All vocabulary insertion consumes features
- ▶ Deletion bleeds further insertion
- ▶ Impoverishment = zero vocabulary insertion

Roadmap

Swahili

Guarani

Menominee

Hungarian

Additional Arguments for Portmanteaus

Apparent Portmanteau Agreement in Swahili (Past)

	V	IV	III	Stem
1sg		ni-	ta-	taka
2sg		u-	ta-	taka
3sg		a-	ta-	taka
1pl		tu-	ta-	taka
2pl		m-	ta-	taka
3pl		wa-	ta-	taka

Positive

1sg	si-		ta-	taka
2sg	ha-	u-	ta-	taka
3sg	ha-	a-	ta-	taka
1pl	ha-	tu-	ta-	taka
2pl	ha-	m-	ta-	taka
3pl	ha-	wa-	ta-	taka

Negative

Apparent Portmanteau Agreement in Swahili (Future)

	V	IV	III	Stem
1sg		ni-	li-	taka
2sg		u-	li-	taka
3sg		a-	li-	taka
1pl		tu-	li-	taka
2pl		m-	li-	taka
3pl		wa-	li-	taka

Positive

1sg	si-		ku-	taka
2sg	ha-	u-	ku-	taka
3sg	ha-	a-	ku-	taka
1pl	ha-	tu-	ku-	taka
2pl	ha-	m-	ku-	taka
3pl	ha-	wa-	ku-	taka

Negative

Stump (2001) on Portmanteau Agreement in Swahili

“in place of the expected combination of the negative prefix *ha-* and the 1sg subject-agreement prefix *ni-*, one finds a single prefix *si-*; *si-* is unusual in that its appearance excludes that of both a competing position V prefix and a competing position IV prefix. The prefix *si-* is, in other words, a member (in fact, the only member) of a portmanteau position class which is simultaneously associated with positions V and IV.” (p.140/141)

Portmanteau Analysis: Vocabulary Items

ta- ↔ [+Past]

ku- ↔ [+Fut]

li- ↔ [+Fut]

/ [+Neg] _____

ni- ↔ [+1-pl]

u- ↔ [+2-pl]

tu- ↔ [+1+pl]

ha- ↔ [+Neg]

si- ↔ [+Neg][+1 -pl]

Alternative Analysis of Swahili

ha-	ni-
-----	-----



∅-	si-
----	-----

- ▶ Head₁ has an overt allomorph contextually restricted to Head₂
- ▶ Head₂ has a ∅-allomorph contextually restricted to Head₁

Alternative Analysis: Vocabulary Items

ta- ↔ [+Past]
 ku- ↔ [+Fut] / [+Neg] ____
 li- ↔ [+Fut]

si- ↔ **[+1]** [**____ -pl**] **[+Neg]**

ni- ↔ [+1-pl]
 u- ↔ [+2-pl]
 tu- ↔ [+1+pl]

Ø- ↔ **[+Neg]** / **____ [-pl]**

ha- ↔ [+Neg]

Alternative Analysis: Derivation of *si-ku-taka*, 'I won't want'

[+Neg]	[+1-pl]	[+Fut]		taka			
_____	_____	_____		_____	ta-	↔	[+Past]
_____	_____	[AFut]		ku-taka	ku-	↔	[+Fut] / [+Neg] _____
_____	_____	_____		_____	li-	↔	[+Fut]
_____	[AFut -pl]	_____		si-ku-taka	si-	↔	[+1] [_____ -pl] [+Neg]
_____	_____	_____		_____	ni-	↔	[+1-pl]
_____	_____	_____		_____	u-	↔	[+2-pl]
_____	_____	_____		_____	tu-	↔	[+1+pl]
[ANeg]	_____	_____		si-ku-taka	Ø-	↔	[+Neg] / _____ [-pl]
_____	_____	_____		_____	ha-	↔	[+Neg]

The Tradeoff

Alternative Analysis

1 more vocabulary item

Portmanteau Analysis

An additional type of vocabulary items

Restructuring vocabulary insertion

More structural ambiguity

Guarani

Intr. Erg.

	sg	pl
1	a-	ro-
2	re-	pe-
3	o-	

Intr. Abs.

	sg	pl
1	je-	ore-
2	ne-	pene-
3	i-	

Transitive Abs.

	1sg	1pl	2sg	2pl	3	
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Portmanteau Analysis of Guarani

ro- ↔ [+1 +pl +Erg]

pe- ↔ [+2 +pl +Erg]

o- ↔ [+3 +Erg]

ore- ↔ [+1 +pl +Abs]

pene- ↔ [+2 +pl +Abs]

i- ↔ [+3 +Abs]

po- ↔ [+1+Erg][+2 +pl +Abs]

Hierarchy-Based Competition in Guarani

Intr. **Erg.**

	sg	pl
1	a-	ro-
2	re-	pe-
3	o-	

Intr. **Abs.**

	sg	pl
1	ʃe-	ore-
2	ne-	pene-
3	i-	

Transitive
Abs.

	1sg	1pl	2sg	2pl	3	
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	ʃe-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Hierarchy-Based Competition in Guarani

1st person \succ 2nd person \succ 3rd person

Only the agreement head

which is higher on the person hierarchy

is spelled out

		Abs.				
		1sg	1pl	2sg	2pl	3
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Hierarchy-Based Competition in Guarani

∅ ↔ [+2] / _____[+1]

∅ ↔ [+3] / _____[+1]

∅ ↔ [+3] / _____[+2]

Abs.

	1sg	1pl	2sg	2pl	3	
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Hierarchy-Based Competition in Guarani

Since [+2] heads are deleted in the context of [+1] heads

po- should be a [+1] Nom marker, not a portmanteau

(deletion of the [+2] Acc head is predicted anyway)

		Abs.				
		1sg	1pl	2sg	2pl	3
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Alternative Analysis of Guarani

a-	∅-
----	----



po-	∅-
-----	----

- ▶ Head₁ has an overt allomorph contextually restricted to Head₂
- ▶ Head₂ is ∅ anyway

Ambiguous Exponence (Trommer, 2006)

An affix is an ambiguous exponent

if it acts as a portmanteau marker in some contexts

and as a simple marker in other contexts

Guarani ro- as an Ambiguous Exponent

ro- ↔ [+1 +pl +Erg]

ro- ↔ [+1 +Erg][+2-pl+Abs]

		Abs.				
		1sg	1pl	2sg	2pl	3
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

The Iconic Representation of Number (Trommer, 2006)

a. Two-way number system

Singular



Plural



b. Three-way number system

Singular



Dual



Plural



New Notation for VI Contexts (Trommer, 2006)

$P \leftrightarrow F_1 \dots F_m / [C_1 \dots C_n]$
 $F_1 \dots F_m$ in the context of $C_1 \dots C_n$
 where $F_1 \dots F_m$ is in Head H_1 ,
 $C_1 \dots C_n$ are in head H_2
 and $H_1 \neq H_2$

$P \leftrightarrow F_1 \dots F_m / C_1 \dots C_n$
 $F_1 \dots F_m$ in the context of $C_1 \dots C_n$
 where $F_1 \dots F_m$ is in Head H_1 ,
 $C_1 \dots C_n$ are in head H_2
 and $H_1 = H_2$

$P \leftrightarrow F_1 \dots F_m / \{C_1 \dots C_n\}$
 $F_1 \dots F_m$ in the context of $C_1 \dots C_n$
 where $F_1 \dots F_m$ is in Head H_1 ,
 and $C_1 \dots C_n$ are in head H_2

Generally:

$Ref(F_1 \dots F_m) \cap Ref(C_1, \dots, C_n)$

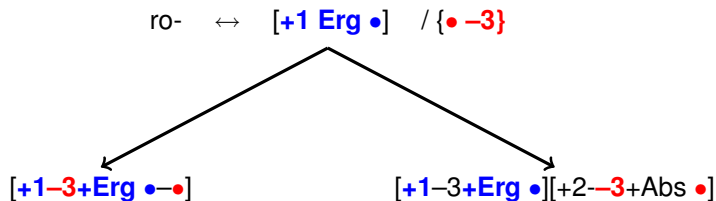
Constructed Number in Guarani

ro- ↔ [+1 +Erg •] / {• -3}

Abs.

		1sg	1pl	2sg	2pl	3
Erg.	1sg			ro-	po-	a-
	1pl					ro-
	2sg	je-	ore-			re-
	2pl					pe-
	3			ne-	pene-	o-

Constructed Number in Guarani



Alternative Analysis of Guarani

ro- ↔ [+1 ●—● +Erg]

pe- ↔ [+2 ●—● +Erg]

o- ↔ [+3 +Erg]

ore- ↔ [+1 ●—● +Abs]

pene- ↔ [+2 ●—● +Abs]

i- ↔ [+3 +Abs]

po- ↔ [+1 +Erg ●] / {●—● -3}

ro- ↔ [+1 +Erg ●] / {● -3}

Alternative Analysis of Guarani

- ▶ Apparent Portmanteau realizes only subject agreement
- ▶ \emptyset -exponence of object agreement independently predicted by Hierarchy-Based Competition
- ▶ Context restrictions account for ambiguous exponence: Same VI acts as (non-)portmanteau in different contexts

1 ↔ 2 Theme Markers in Menominee (Independent Order)

3 → 1/2 forms

- a. ne-na:n-**eko**-w 'he fetches me' (p. 154)
 1-Stamm-Inv-[+3]
- b. ke-na:n-**eko**-w 'he fetches you (sg.)' (p. 154)
 2-Stamm-Inv-[+3]

1 ↔ 2 forms

- a. ke-na:tom-**enɛnɛ**-m-enaw 'we call you (sg./pl.)' (p. 156)
 call-TH-[+3]-1pl
- b. ke-nɛ:w-**e**-m 'you (sg.) see me' (p. 156)
 see-TH-[-3]

Menominee 1 ↔ 2 Theme Markers as Portmanteaus

-e ↔ [+2+Nom][+1+Acc]

-enens ↔ [+1+Nom][+2+Acc]

cf. Bickel & Nichols (2007)

1 ↔ 2 Theme Markers in Menominee (Conjunct Order)

3 → 1/2 forms

- a. na:tom-**enens**-an 'when I call you (sg.)' (p. 183)
call-TH-[-3]
- b. nɛ:w-**e**-yan 'when you (sg.) see me' (p. 181)
see-TH-[-3]

1 ↔ 2

- a. na:tom-**enens**-k 'when he calls you (sg.)' (p. 183)
call-TH-[+per]
- b. nɛ:w-**e**-t 'when he sees me' (p. 181)
see-TH-[+3]

Distribution of -e, -eko and -enenε

	Independent Order		Conjunct Order	
-e	2	→ 1	2	→ 1
	3	→ 1	3	→ 1
-eko	[-an]	→ 1	[-an]	→ 1
	[-spec]	→ 1	[-spec]	→ 1
	[-spec]	→ 2	[-spec]	→ 2
	[-an]	→ 2	[-an]	→ 2
-enenε	3	→ 2	3	→ 2
	1	→ 2	1	→ 2

Alternative Analysis of -e and -enens

-e ↔ [+1+Acc]

-enens ↔ [+2+Acc]

→ Brittain (2001), Zuniga (2002),

Another Theme Marker As Object Agreement

- a. no:ht-**am**-an ‘when I/you hear it’ (p. 185)
hear-TH-[-3]
- b. no:ht-**am**-k ‘when he hears it’ (p. 185)
hear-TH-[+per]
- c. no:ht-**am**-makat-k ‘when it hears it’ (p. 185)
hear-TH-LRS-[+per]

Theme Marker Summary

-e ↔ [+1+Acc]

-enens ↔ [+2+Acc]

-am ↔ [-an+Acc]

→ Theme Markers express object agreement

→ Brittain (2001), Zuniga (2002),

Direct-Inverse Marking in Algonquian (Menominee)

Direct: If the subject is higher on the hierarchy than the object, the verb is marked by **-a**:

1st/2nd person \succ indefin. actor \succ proximate \succ obviative \succ inanimate



Inverse: If the object is higher on the hierarchy than the subject, the verb is marked by **-ek**

Direct-Inverse Marking in Algonquian (Menominee)

		Object			
		1/2	prox.	obv.	inan.
Subject	1/2	—	D	D	D
	prox.		—	D	D
	obv.			—	D
	inan.				—

Inverse and Prominence

		Subject	Object
3	→ 1	[+3] [h 3]	[-3] [l 3]
Obv	→ 3	[+obv] [h obv]	[-obv] [l obv]
Inanimate	→ Obv	[-an] [h an]	[+an] [l an]

-eko ↔ [**l**F +Acc] / [**h**F +Nom]

-a: ↔ [**l** +Acc] (Default)

Portmanteau Agreement in Hungarian (Trommer, 2003)

szeret-ek
love-1sg

'I love'

szeret-ek egy hercegnét
love-1sg a princess:Acc

'I love a princess'

szeret-**em** a hercegnét
love-1sg the princess:Acc

'I love the princess'

szeret-**lek** téged
love-1sg you:Acc

'I love you'

Portmanteau Agreement in Hungarian

		Object	
		[-def]	[+def]
Subject	1sg	szeret- ek egy hercegnét	szeret- em a hercegnét
	2sg	szeret- sz egy hercegnét	szeret- ed a hercegnét
	3sg	szeret- ∅ egy hercegnét	szeret- i a hercegnét

Portmanteau Analysis of Hungarian

-ek ↔ [+Nom +1 -pl]

-em ↔ [+Nom +1 -pl] [+Acc +def]

-lek ↔ [+Nom +1 -pl] [+Acc +2]

Main Problem for a Portmanteau Analysis

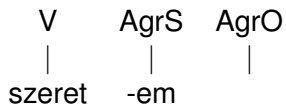
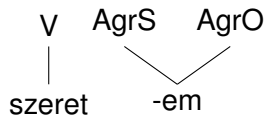
-em occurs in intransitive forms:

- ▶ Past tense Forms
- ▶ Intransitive Ik-verbs
- ▶ Possessive Forms and Inflected Postpositions

Distribution of -em

	intransitive ind. object	intr. ik verb	intr./ind. past	def. object	possessors postpositions
1sg	-ek	-em	-em	-em	-em
2sg	-sz/-el	-el	-eel	-ed	-ed
3sg	-∅	-ik	-∅	-i	-e
1pl	-ünk	-ünk	-ünk	-jük	-ün-k
2pl	-tek	-tek	-etek	-itek	-te-k
3pl	-nek	-nek	-ek	-ik	-(j)ü-k

Alternative Analysis



Subanalysis of Apparent Portmanteaus I

	intr. pres.	intr. pres. ik	intr. past	def. obj. past	def. obj. pres.
1sg	-ek	-em	-em	-em	-em
2sg	-sz/-el	-el	-e-el	-ed	-ed
3sg	-∅	-ik	∅	-e-∅	-i-∅
1pl	-ün-k	-ün-k	-ün-k	-(j)ü-k	-(j)ü-k
2pl	-te-k	-te-k	-e-te-k	-e-e-te-k	-i-te-k
3pl	-ne-k	-ne-k	-e-k	-e-e-k	-i-k

Subanalysis of Apparent Portmanteaus II

Subject	szeret-nee- l V-cond- 2sg	kert- e N- 3sg
Subject	szeret- ek V- 1sg	eerte-tte- tek V-Past- 2pl
Object + Subject	szeret- l-ek V- 2sg -1sg	eerte-tte- e-tek V-Past- 3sg - 2pl

Trommer (2002) on Portmanteaus

Portmanteaus behave differently from simple markers w.r.t affix order restrictions.

But:

Alleged portmanteaus in the relevant languages are the only affixes specifying case

(enough to keep them apart)

Menominee Person Prefixes

- a. **ne-po:se-m** 'I embark' (p. 150)
1-embark-[-3]
- b. **ne-na:n-ek-w** 'he fetches **me**' (p. 154)
1-fetch-D-[+3]
- c. **ne-na:n-a:-w** 'I fetch him' (p. 152)
1-fetch-D-[+3]

Nevins (2007) on Portmanteaus

Portmanteaus crowd particularly
in 1 ↔ 2 combinations

But:

This might follow independently
from the reluctance of 1st/2nd person
against \emptyset -exponence

Zero Exponence and Person

Hungarian

Intransitive **2sg**

-sz

-sz ↔ [**+2**-pl]

Intransitive **3sg**

∅

—

Guarani

1 → **2**

po-

po- ↔ [+1] / [**+2**]

1 → **3**

a-

po- ↔ [+1] —

Summary

- ▶ Portmanteau agreement is systematically ambiguous to \emptyset -exponence + allomorphy
- ▶ Many apparent portmanteaus **can** be analyzed as single markers without additional cost
- ▶ Many apparent portmanteaus **must** be analyzed as single markers