

# An SBCG analysis of “middle” *je-* in Paraguayan Guarani

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# The *je-* prefix

## Passive

- (1) a. *María ojehayhu.*

**María o-je-**hayhu

**María 3.A-JE-**to.love

‘María **is loved.**’

(Canese & Acosta Alcaraz, 2007, 95)

- b. *Ange pyhare jerokyhápe ma'ëra ojejapi.*

ange -pyhare jerokyhape **ma'ëra o-je-**japi

last.night at.the.dance **some.guy 3.A-JE-**to.shoot

‘Last night at the dance some guy **was shot.**’

(Guarani, 2008, 44)

- c. *(che) ajejapi*

**che a-je-**japi

**I 1SG.A-JE-**to.shoot

‘I **was shot.**’

(Guarani Ñe'ë Rerekuapavẽ, 2020, 122)

- d. *(che) añekytĩ*

**che a-je-**kytĩ

**I 1SG.A-JE-**to.cut

‘I **was cut.**’

(Guarani Ñe'ë Rerekuapavẽ, 2020, 122)

# The *je-* prefix

## Reflexive

- (2) a. *Pe mitã ojejovahéi pe y ky'ápe.*

pe mitã o-je-jovahéi pe y ky'á=pe  
that child 3.A-JE-to.face.wash that water dirty=with

‘That child **washes their (own) face** with dirty water.’ (Guarania, 2008, 44)

- b. *Oñekytĩ ohakã'onguévo yvyrarakã.*

o-je-kytĩ ohakã'onguévo yvyrarakã.  
3.A-JE-to.cut while.was.removing.top tree-head

‘(S)he cut **himself/herself** while trimming the tree.’ (Guarania, 2008, 44)

# Other uses of the *je-* prefix

## Autocausative

- (3) a. ... *opoije iñirúgui ha oñembojere*...

*opoije iñirúgui ha o-ñe-mbojere*

he.let.go of.his.friend and 3.A-JE-to.make.turn

'... he let go of his friend and **turned around**...' (Zarratea, "Kalaíto Pombero", cited in Velázquez-Castillo, 2008, 391)

- b. (*che*) *ajepepy*

*che a-je-pepy*

I 1SG.A-JE-to.bend

'I bend (backwards)' (Guasch & Ortiz, 1998, 583)

# Other uses of the *je-* prefix

## Anticausative

- (4) a. *Ovetã ojepe'a.*

ovetã o-je-pe'a

window 3.A-JE-to.open

'The window **opened**.' (Estigarribia, 2020, 87)

- b. *Pe yvy oñemonandiete.*

pe yvy o-je-mo-nandi-ete

that ground 3.A-JE-CAUS-empty-very

'The ground **emptied** completely.'

# Uses of the *je-* prefix

## Impersonal

- (5) a. *Al fin ojesapukái.*

al -fin o-je-sapukái  
finally 3.ACT-JE-to.scream

‘A goal was finally celebrated.’ (more literally ‘Finally **there was screaming**’)

- b. *Heta gueteri oñemanovéta ndopáirõ la ñorairõ.*

Heta gueteri o-je-mano-ve-ta ndopáirõ la ñorairõ  
much even 3SG.ACT-JE-to.die-more-FUT if.not.end the fight

‘Even **more dying will occur** if the fight does not end.’

(Velázquez-Castillo 2008: 393)

# *Je*-prefixed predicates

## Interpretations

Strict reflexive

Autocausative

Anticausative

Passive

Impersonal

# Questions

- General function of *je-*
- Licensing of readings
- Interaction with argument indexing



# Danish, German, English passives

Müller & Ørsnes (2013)

Lexical rule: suppression of designated argument of a verb (first argument of ARG-ST, except for unaccusatives)

Similarities:

- Guarani morphological passive (like Danish)

- Guarani impersonal passive (like Danish and German)

Differences:

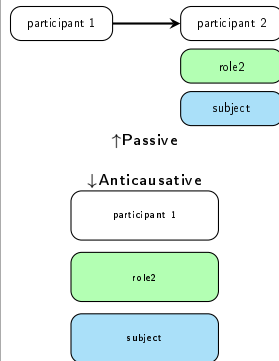
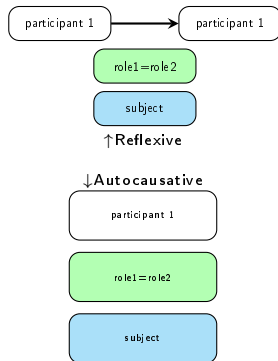
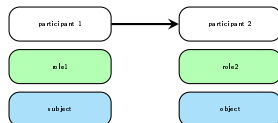
- Guarani “middle-like” syncretism (reflexive-passive)

- Unaccusatives not exempted

- Guarani complex cross-referencing system

# Je- readings

## Direct transitive



## *Je-* effects

- Valence: Intransitivizer
- Linking:  $\text{semrole}_{\text{TERM2}} \sim \text{subject}$

- (6) a. *ojesapukái.*  
o-je-sapukái  
3.ACT-JE-to.scream  
'there was screaming'
- b. *oñemano*  
o-je-mano-ve-ta  
3SG.ACT-JE-to.die  
'there is dying'

## *Je-* effects

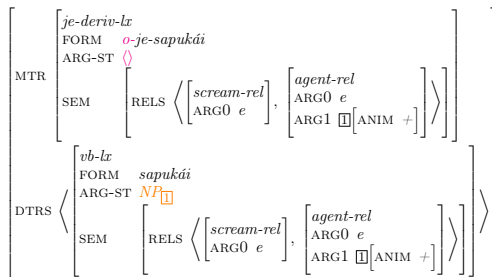
- Valence reducer:  $-1$
- Linking:  $(\text{role2} \sim \text{subject})$

# $Je$ - effects: generalization

$$\left[ \begin{array}{l} \text{MTR} \\ \text{DTRS} \end{array} \left[ \begin{array}{l} \begin{array}{l} je\text{-deriv-}lx \\ \text{FORM } je\text{-}X \\ \text{ARG-ST } \langle (NP_{\textcolor{blue}{4}}) \rangle \\ \text{SEM } \left[ \text{RELS } \left\langle \left[ \begin{array}{l} verb\text{-}rel \\ \text{ARG0 } e \end{array} \right], \left[ \begin{array}{l} semrole1\text{-}rel \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{3} \end{array} \right] \left( \left[ \begin{array}{l} semrole2\text{-}rel \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{4} \end{array} \right] \right) \right\rangle \right] \end{array} \\ \begin{array}{l} vb\text{-}lx \\ \text{FORM } X \\ \text{ARG-ST } NP_{\textcolor{brown}{1}} \oplus (NP_{\textcolor{blue}{2}}) \\ \text{SEM } \left[ \text{RELS } \left\langle \left[ \begin{array}{l} verb\text{-}rel \\ \text{ARG0 } e \end{array} \right], \left[ \begin{array}{l} semrole1\text{-}rel \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{1} \end{array} \right] \left( \left[ \begin{array}{l} semrole2\text{-}rel \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{2} \end{array} \right] \right) \right\rangle \right] \end{array} \end{array} \right] \right] \rangle$$

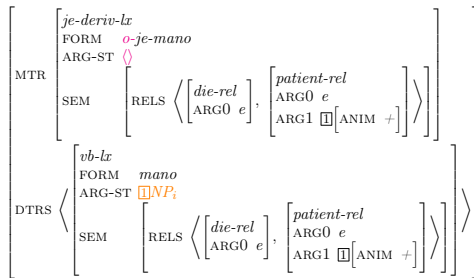
# Impersonal

*ojesapukái* 'there is screaming'



# Impersonal

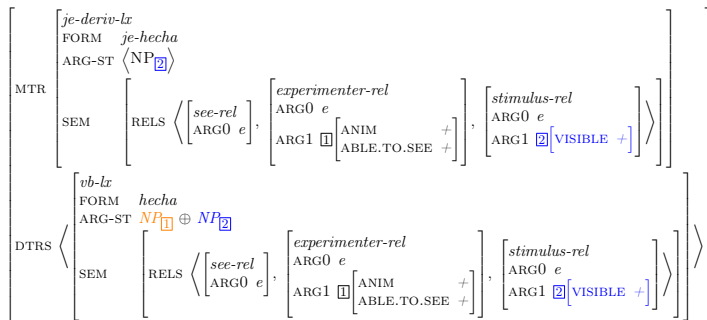
*oñemano* 'there is dying'





# Reflexive/Passive ambiguity

*jehecha* 'be seen' / 'see oneself'



# Reflexive/Passive ambiguity resolved in context

*ojehecha* 'it is seen'

	<i>infl-vb-lx</i>
FORM	<i>o-je-hecha</i>
ARG-ST	$\langle \text{NP } \textcolor{blue}{2} \rangle$
SEM	$\left[ \text{RELS } \left\langle \left[ \begin{array}{c} \textit{see-rel} \\ \text{ARG0 } e \end{array} \right], \left[ \begin{array}{c} \textit{experimenter-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{1} \left[ \begin{array}{c} \text{ANIM} \\ \text{ABLE.TO.SEE} \end{array} \right] \begin{array}{c} + \\ + \end{array} \end{array} \right], \left[ \begin{array}{c} \textit{stimulus-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \textcolor{blue}{2} \left[ \begin{array}{c} \text{VISIBLE} \\ + \end{array} \right] \end{array} \right] \right\rangle \right]$
CNTXT	$\left[ \begin{array}{c} \textit{context} \\ \text{BACKGR } \textcolor{blue}{2} \left[ \begin{array}{c} \textit{object-fr} \\ \text{INDEX } 3 \\ \text{ABLE.TO.SEE } - \end{array} \right] \end{array} \right]$

# Reflexive/Passive ambiguity resolved in context

*ojehecha* 'it is seen'

(7) *Py'ỹinte ojehecha oĩha pe ojejukase...*

py'ỹi=nte o-je-hecha oĩ-ha pe o-je-juka-se  
often=just 3.A-JE-to.see there.is-COMP that 3.A-JE-to.kill-want

'Frequently **it is seen** that there are those who want to kill **themselves**...'  
(<https://gn.wikipedia.org/wiki/Jejukaha>)

# Questions

- General function of *je-*
- Licensing of readings
- Interaction with argument indexing

# PG Argument indexing

## Monadic predicates

(8) a. (*che*) *aguata*

che            a-guata  
1SG.SUBJ 1SG.A-to.walk  
'I walk'

b. (*nde*) *remano*

nde            re-mano  
2SG.SUBJ 2SG.A-to.die  
'you died'

c. (*che*) *chehu'u*

che            che-hu'u  
1SG.SUBJ 1SG.CHE-a.cough  
'I cough'

d. (*nde*) *ndekane'õ*

nde            nde-kane'õ  
2SG.SUBJ 2SG.CHE-tired  
'you are tired'

# PG Argument indexing

## Monadic predicates

- (9) a. (*che*) *a* *pyta*  
          'I stay'  
      b. (*péva*) *o* *pu*  
          '(that) bursts'  
      c. (*péva*) *o* *pupu*  
          '(that) boils'

- (10) a. (*che*) *chehu'u*  
          'I cough'  
      b. (*ha'e*) *hasě*  
          '(s)he cries'

# PG Argument indexing

## Dyadic predicates: governed transitives

- (11) a. (Che) *aikotevẽ nderehe*.

che            a-ikotevẽ            nde=rehe  
1SG.SUBJ 1SG.A-to.need you.SG=OBL

'I need you.'

- b. (Che) *amaña nderehe*.

che            a-maña            nde=rehe  
1SG.SUBJ 1SG.A-to.look you.SG=OBL

'I am looking at you.'

- (12) a. (Che) *chemandu'a nderehe*.

che            che-mandu'a            nde=rehe  
1SG.SUBJ 1SG.CHE-remembrance you.SG=OBL

'I remember you.'

- b. (Nde) *nderesarái ichugui*.

nde            nde-resarái            ichugui  
2SG.SUBJ 2SG.CHE-oblivion 3.ABL

'You forgot it/him/her.'

# PG Argument indexing

## Dyadic predicates: direct transitives

- (13) a. (che) *ajuka ichupe*.

che            a-juka            ichupe  
1SG.SUBJ 1SG.A-to.kill 3.ANIM.OBJ

'I killed him/her.'

- b. (Nde) *rehecha ichupe*.

nde            re-hecha            ichupe  
2SG.SUBJ 2SG.A-to.see 3.ANIM.OBJ

'You saw him/her.'

- (14) a. (Nde) *chejuka*.

nde            che-juka  
2SG.SUBJ 1SG.CHE-to.kill

'You killed me.'

- b. (Ha'e) *nderecha*.

ha'e            nde-recha  
3SG.SUBJ 2SG.CHE-to.see

'He/She saw you.'



# PG Argument indexing

- Lexical: inflection by *a-* or *che-* set indexes (cross-referencing the single term)
- Direct transitives:
  - The index cross-references the highest term in the person hierarchy
    - Highest term: subject  $\Rightarrow$  *a-* set
    - Highest term: object  $\Rightarrow$  *che-* set

# PG Argument indexing

$F_A$ -set prefix	Source-Subject (S)	
	Source-Subject (A)	DO of Transitives (P)
$F_{ro^1}$	N/A	N/A
$F_{ro^1}$	1sg / 1pl	2sg
$F_{po}$	N/A	N/A
$F_{po}$	1sg / 1pl	2pl
$F_a$	1sg	$\emptyset$
$F_a$	1sg	3
$F_{ja}$	1pl.inclusive	$\emptyset$
$F_{ja}$	1pl.inclusive	3
$F_{ro^2}$	1pl.exclusive	$\emptyset$
$F_{ro^2}$	1pl.exclusive	3
$F_{re}$	2sg	$\emptyset$
$F_{re}$	2sg	3
$F_{pe}$	2pl	$\emptyset$
$F_{pe}$	2pl	3
$F_o$	3 <sub>i</sub>	$\emptyset$
$F_o$	3 <sub>i</sub>	3 <sub>i/j</sub>

$F_{Che}$ -set prefix	Subject (S)	
	Source-Subject (A)	DO of Transitives (P)
$F_{che}$	1sg	$\emptyset$
$F_{che}$	2/3	1sg
$F_{ande}$	1pl.inclusive	$\emptyset$
$F_{ande}$	2/3	1pl.inclusive
$F_{ore}$	1pl.exclusive	$\emptyset$
$F_{ore}$	2/3	1pl.exclusive
$F_{nde}$	2sg	$\emptyset$
$F_{nde}$	3	2sg
$F_{pende}$	2pl	$\emptyset$
$F_{pende}$	3	2pl
$F_i$	3	$\emptyset$
$F_i$	3 <sub>i</sub>	3 <sub>i/j</sub>

# Velázquez-Castillo (2002)

## Predicate construal as determinant of indexing

- *a-* indexes participants lexically construed as **sources** of change or metaphorical energy flow (“actors”)
- *che-* indexes participants lexically construed as **locations** of change or **targets** of metaphorical energy flow (“non-actors”)
- if an argument is the source, it is realized as the subject.

# Velázquez-Castillo (2008)

## Je- prefixation

*“...je- marks the cancellation of the default outwardly projection of active events [NB: events with a source] [...] The event or relation is viewed as circumscribed by a sphere defined by the most proximate entity available in the scene.” (Velázquez-Castillo, 2008, 394)*

# Je- prefixation in HPSG/SBCG

## Default Construal Constraints

$$\boxed{0} \left[ \begin{array}{l} \text{dir-tr-vb-lx} \\ \text{SRC} \quad \langle \boxed{1} \rangle \\ \text{SEM} \quad \left[ \text{RELS} \quad \left\langle \left[ \begin{array}{l} \text{verbing-rel} \\ \text{VERBROLE1} \quad \boxed{1} \quad i \\ \text{VERBROLE2} \quad j \end{array} \right] \right\rangle \right] \end{array} \right] \Rightarrow \boxed{0} \left[ \begin{array}{l} \text{ARG-ST} \quad \langle \boxed{2}\text{NP}_i, \boxed{3}\text{NP}_j \rangle \\ \text{XARG} \quad \langle \boxed{2} \rangle \end{array} \right]$$

# *Je-* prefixation in HPSG/SBCG

## Default Construal Constraints

$$\begin{bmatrix} \textit{src-intr-vb-lx} \\ \text{SRC } \textit{nelist} \end{bmatrix}$$

$$\boxed{0} \begin{bmatrix} \textit{word} \\ \text{SRC } \textit{nelist} \end{bmatrix} \Rightarrow \boxed{0} \begin{bmatrix} \textit{word} \\ \text{FORM } F_{A-}(X) \end{bmatrix}$$

# Je- prefixation in HPSG/SBCG

$$\left[ \begin{array}{l} \text{MTR} \left[ \begin{array}{l} \text{je-deriv-lx} \\ \text{FORM } \text{je-X} \\ \text{ARG-ST } \langle (\boxed{5}\text{NP}\boxed{4}) \rangle \\ \text{SRC } \boxed{5} \\ \text{SEM } \left[ \text{RELS } \left\langle \left[ \begin{array}{l} \text{verb-rel} \\ \text{ARG0 } e \end{array} \right], \left[ \begin{array}{l} \text{semrole1-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \boxed{3} \end{array} \right] \left( \left[ \begin{array}{l} \text{semrole2-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \boxed{4} \end{array} \right] \right) \right\rangle \right] \end{array} \right] \\ \\ \text{DTRS } \left\langle \left[ \begin{array}{l} \text{src-vb-lx} \\ \text{FORM } X \\ \text{ARG-ST } \boxed{3}\text{NP}\boxed{1} \oplus (\text{NP}\boxed{2}) \\ \text{SRC } \boxed{3} \\ \text{SEM } \left[ \text{RELS } \left\langle \left[ \begin{array}{l} \text{verb-rel} \\ \text{ARG0 } e \end{array} \right], \left[ \begin{array}{l} \text{semrole1-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \boxed{1} \end{array} \right] \left( \left[ \begin{array}{l} \text{semrole2-rel} \\ \text{ARG0 } e \\ \text{ARG1 } \boxed{2} \end{array} \right] \right) \right\rangle \right] \end{array} \right] \right\rangle \end{array} \right]
 \end{array}$$

## Some remaining issues

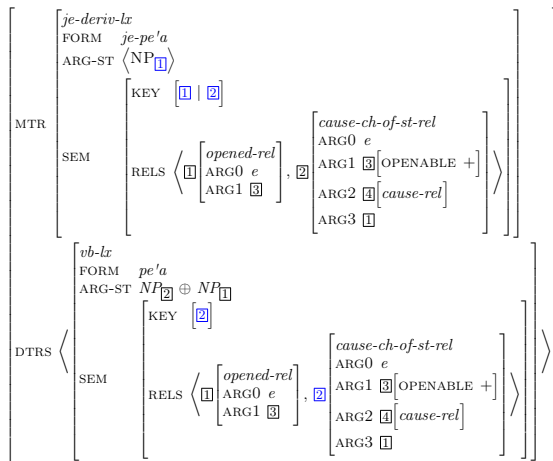
Anticausative

Deverbal nominalizations



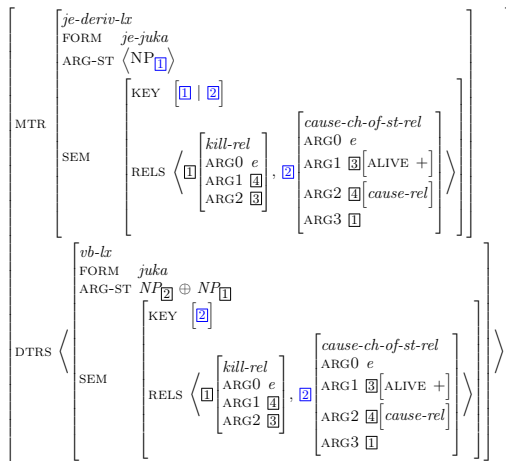
# Anticausative/Passive ambiguity

*jepe'a* 'be opened' / 'open by itself'



# No anticausative

*jejuka* 'be killed'



# Función como nominalizador deverbal

- (15) a. ... *ijejuka* mboyve, pa'i oja'ohague umi polítikope...

i-je-juka                      mboyve pa'i    oja'ohague umi    polítikope  
3.CHE-JE-to.kill before    priest criticized    those politicians

'...before *his murder*, the priest had criticized those politicians...' (blog post, "Táva Kapiata", David Galeano Olivera, 2017  
<https://lenguaguarani.blogspot.com/2017/02/ciudad-de-capiata-tava-kapiata.html>)

- b. ... *rembopo'ive haña ndejeheka*.

rembopo'ive                                      haña nde-je-heka  
2SG.A-CAUS-narrow-more for              2SG.CHE-JE-to.look.for

'... to limit *your search*.' ("Eheka umi Jhaipy Tembiasakue rehegua"  
<https://www.familysearch.org/gn/search/>)

- c. ... *oikóta la jeka'u*...

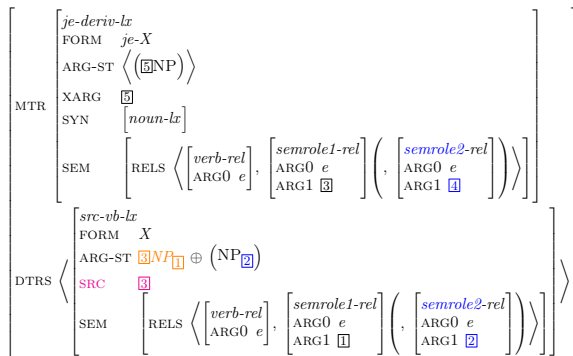
oikóta                      la    je-ka'u  
there.will.be the JE-to.get.drunk

'... there will be *drunkenness*.' ("¡Bruno Pont contó lo que pasaría si el Ciclón gana la Libertadores!")  
<https://www.popular.com.py/2024/10/14/video-bruno-pont-conto-lo-que-pasaria-si-el-ciclon-gana-la-libertadores/>)

## Deverbal nominalizations

- (16) a. *ijejuka* (role 2 argument)  
          ‘his murder’  
      b. *ndejeheka* (role 1 argument)  
          ‘your search’  
      c. *jeka'u* (no arguments)  
          ‘drunkenness’

# Deverbal nominalizations





# References

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