

ON THE SCOPE OF INFLECTIONAL AND DERIVATIONAL AFFIXES IN SPANISH NN COMPOUNDS

Headedness in the L2 grammar

Rachel Klassen^{1,2} & Juana M. Liceras^{1,3}

¹University of Ottawa

²UiT The Arctic University of Norway

³Universidad Nebrija



AIM

To examine whether L1 and L2 Spanish speakers treat inflectional and derivational morphology in the same way in Noun-Noun (NN) compounds.

perro policía

‘police dog’



dos perro-s policía

‘two police dogs’



un perr-ito policía

‘a little police dog’



NN COMPOUNDS

Inflectional morphology



INFLECTIONAL MORPHOLOGY

un perro policía

‘a police dog’



INFLECTIONAL MORPHOLOGY

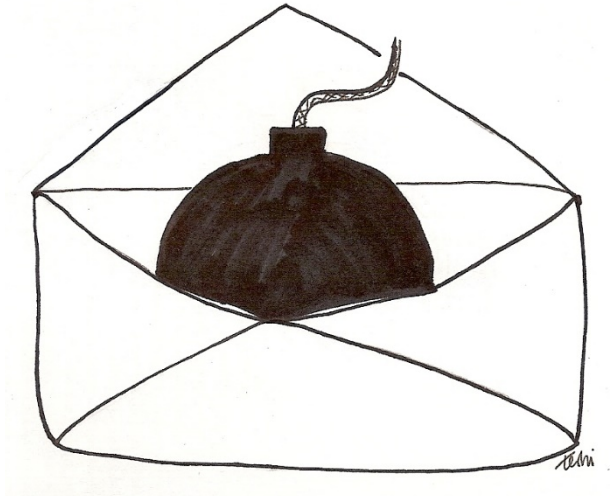


dos perross policía / *dos perro policíass

two dogs police

‘two police dogs’

INFLECTIONAL MORPHOLOGY

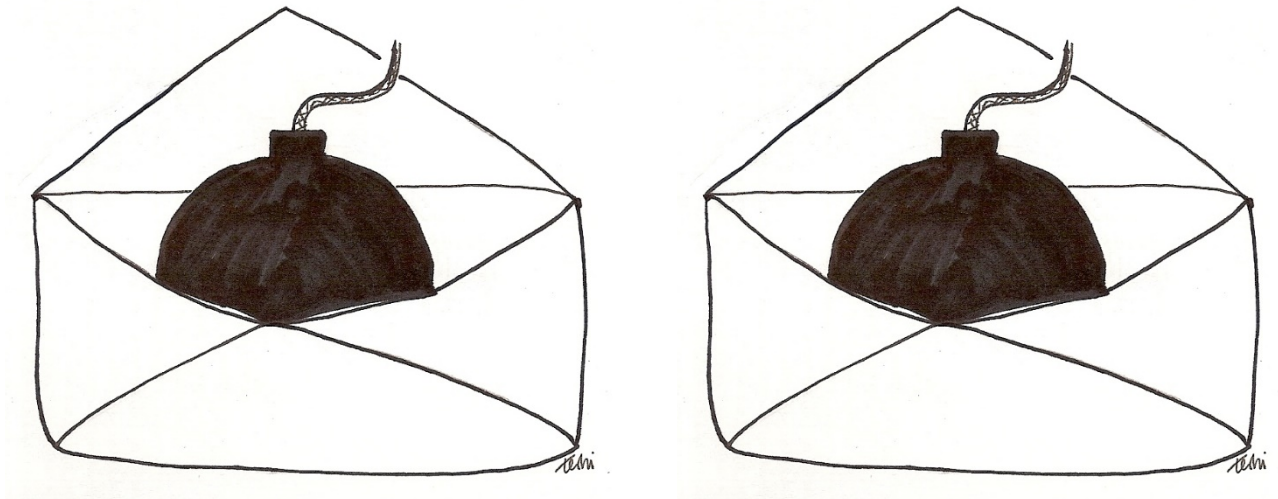


una carta bomba

a letter bomb

'a letter bomb'

INFLECTIONAL MORPHOLOGY



dos carta_s bomba / *dos carta bomba_s

two letter_s bomb

‘two letter bombs’

INFLECTIONAL MORPHOLOGY

- What is a '**carta bomba**'?
 - a letter...
- What is a '**letter bomb**'?
 - a bomb...

INFLECTIONAL MORPHOLOGY

- inflectional morphology and headedness
 - Spanish: left-headed
 - English: right-headed



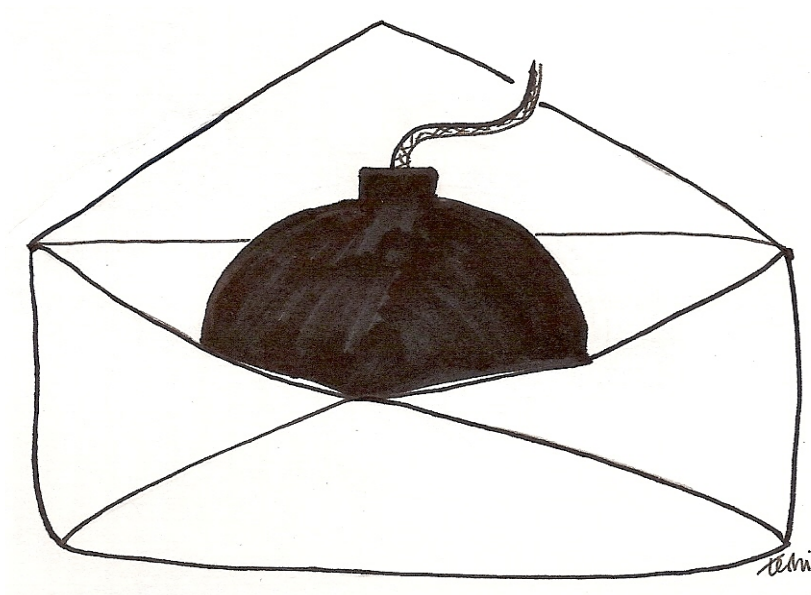
N-N COMPOUNDS

Derivational morphology

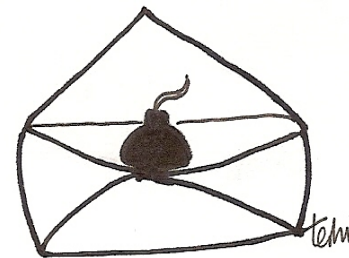


DERIVATIONAL MORPHOLOGY

carta bomba



cartita bomba



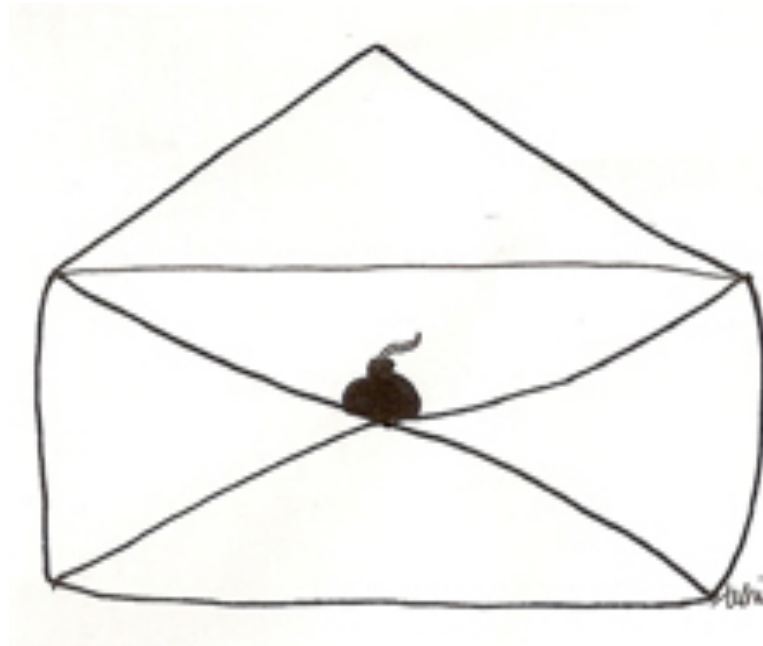
DERIVATIONAL MORPHOLOGY

¿cartita bomba?



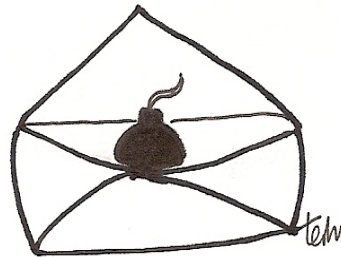
DERIVATIONAL MORPHOLOGY

¿carta bombita?



DERIVATIONAL MORPHOLOGY

¿cartita bombita?



DERIVATIONAL - INFLECTIONAL

casita cuna

little house crib / 'little crib house'

*casa cunita

Zwicky (1988)

BUT...

- Scope selection

casita cuna

casa cunita

Cinque (2005)



PREVIOUS BILINGUAL RESEARCH

N-N compounds



HEADEDNESS

Previous research examining headedness in NN compounds has shown that bilinguals produce right-headed compounds in left-headed languages.

This lack of sensitivity to headedness has been shown for the following groups:

- L1 English-L2 Spanish adults (Liceras et al., 2002; Liceras & Díaz, 2000)
- L1 French-L2 Spanish adults (Liceras et al., 2002; Liceras & Díaz, 2000)
- L1 Finnish-L2 Spanish adults (Liceras et al., 2002)
- 2L1 French-English children (Nicoladis, 2002, 2003)

DERIVATIONAL MORPHOLOGY

To the best of our knowledge, only one previous study has examined derivational morphology in Spanish NN compounds (Liceras & Klassen, Forthcoming).

In this interpretation study, 60 L1 English-L2 Spanish adults were asked to select the picture that best represented the written compound in which the attachment of *-ito* was manipulated:

hombrecito lobo

man-little wolf



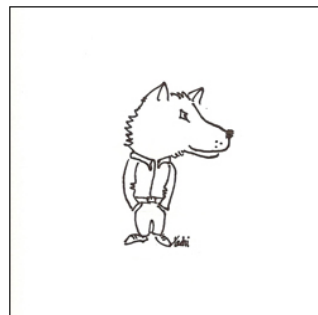
hombre lobito

man wolf-little



hombrecito lobito

man-little wolf-little



DERIVATIONAL MORPHOLOGY

The results showed that these speakers individualized the attachment of *-ito*:

hombrecito lobo

- *-ito* on the head N
only affects the head
(man part)



hombre lobito

- *-ito* on the modifier N
only affects the
modifier (wolf part)



This indicates that L1 English-L2 Spanish speakers are not sensitive to headedness in the interpretation of derivational morphology in NN Spanish compounds.



PRESENT STUDY

Inflection & derivation
in N-N compounds



RESEARCH QUESTION

Will derivational morphology be treated as inflectional morphology by L2 Spanish speakers with respect to headedness?

hombres lobo / *hombre lobos

‘werewolves’

hombrecito lobo / ?hombre lobito

‘little werewolf’

If the two types of morphology behave the same...

- both affixes on the head will be the preferred option
- the diminutive on the modifier will be the least preferred, since modifier attachment with inflectional morphology is ungrammatical

ACCEPTABILITY JUDGMENT TASK

Participants

- 27 L1 English-L2 Spanish speakers
 - advanced level of proficiency in Spanish
- 66 L1 Spanish speakers

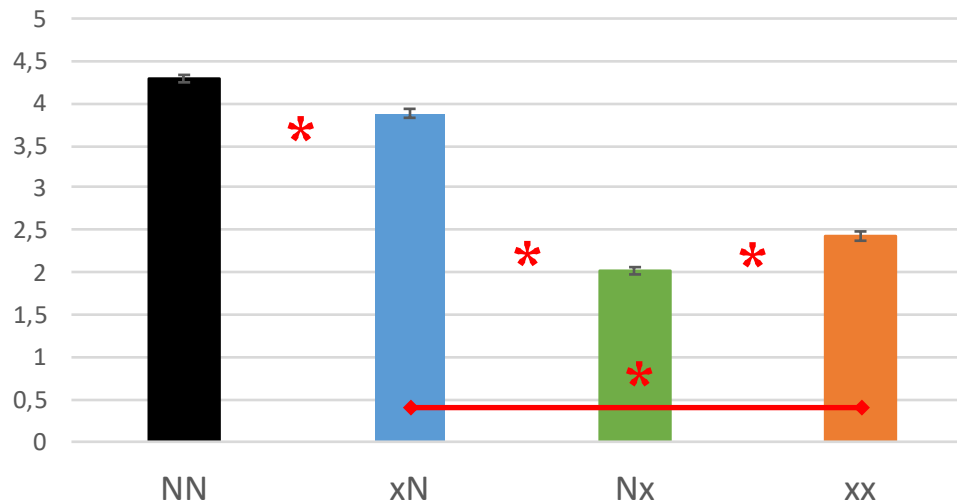
Task

- rate the written compound on a 5-point Likert scale
- 8 compounds

compound type		inflection	derivation
NN	<i>carta bomba</i>	--	--
xN	affix on head	<i>cartas bomba</i>	<i>cartita bomba</i>
Nx	affix on modifier	<i>carta bombas</i>	<i>carta bombita</i>
xx	affix on both Ns	<i>cartas bombas</i>	<i>cartita bombita</i>

RESULTS: INFLECTION

L1

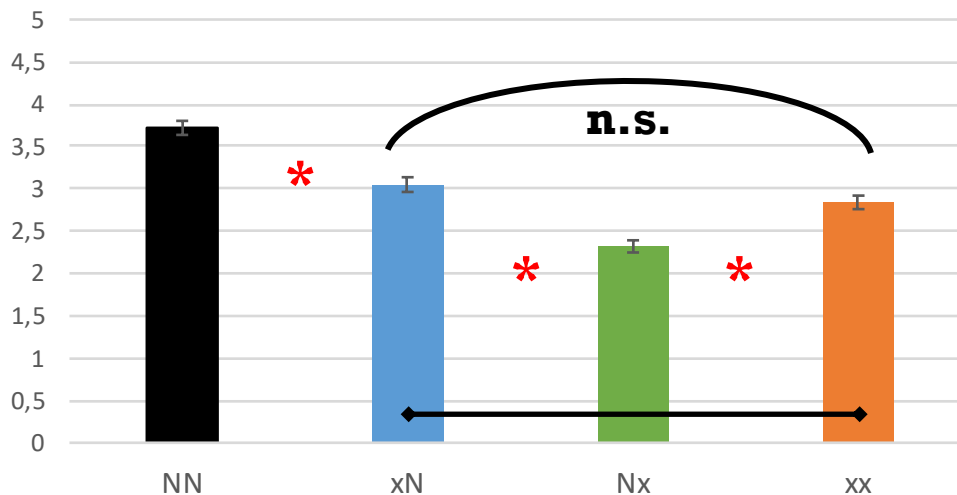


- **highest rated:**
affix on head
- **lowest rated:**
affix on modifier

cartas bomba

**carta bombas*

L2



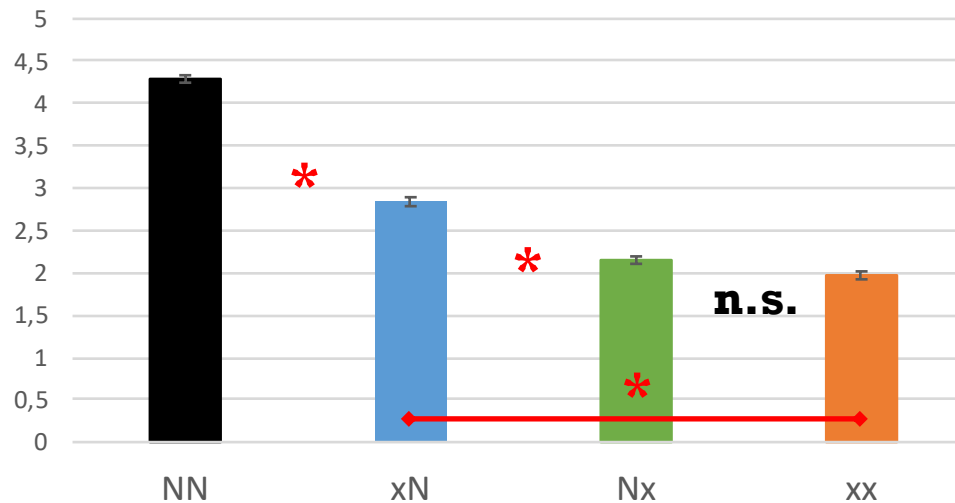
higher rating of affix
on the head vs affix
on both Ns is only a
trend in the L2 data

cartas bomba

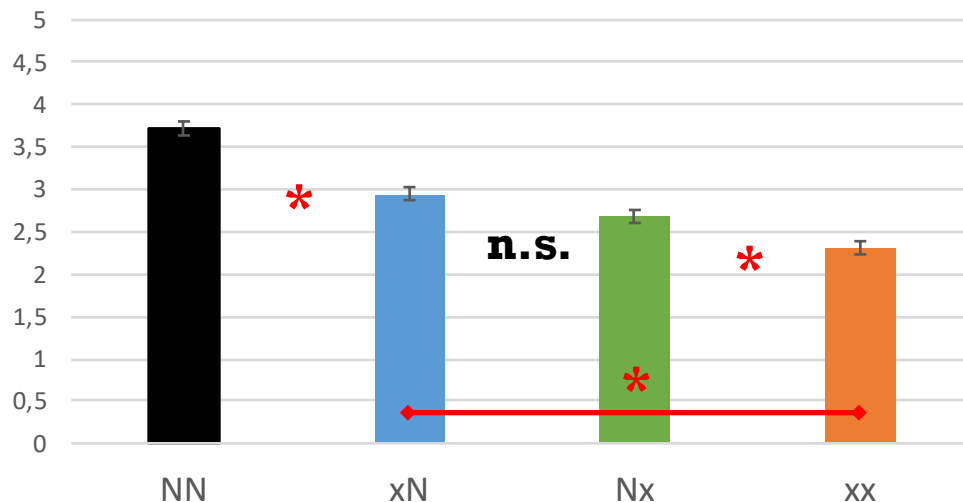
**cartas bombas*

RESULTS: DERIVATION

L1



L2



- **highest rated:**
affix on head
- **lowest rated:**
affix on both Ns
(trend in L1)

cartita bomba

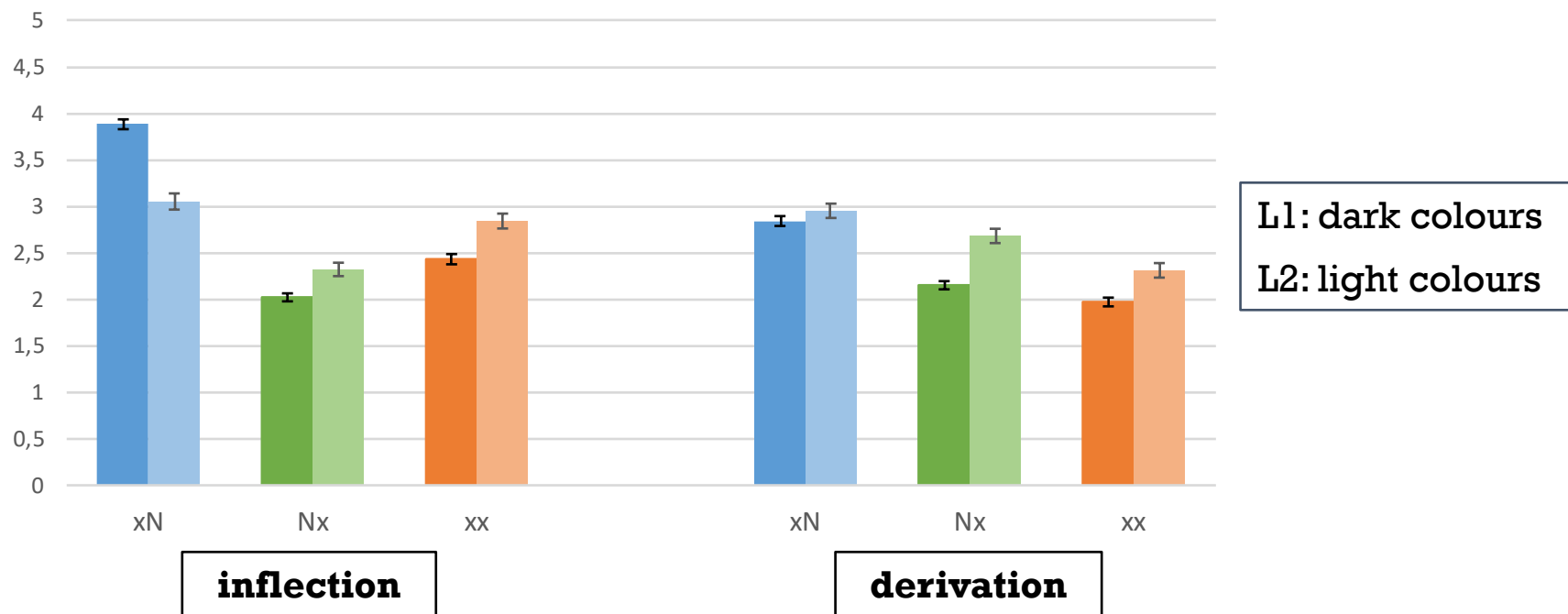
cartita bombita

higher rating of affix
on the head vs affix
on the modifier only
a trend in the L2
data

cartita bomba

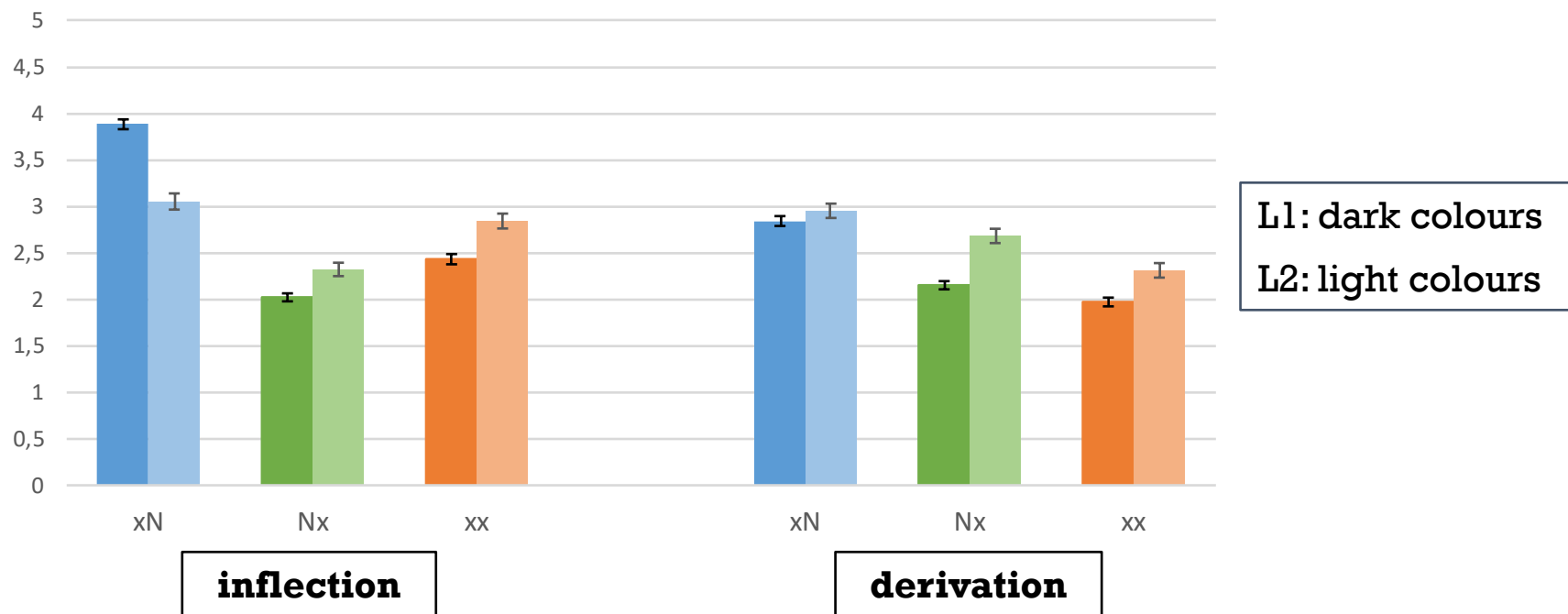
carta bombita

RESULTS: INFLECTION VS DERIVATION



- overall ratings significantly higher for compounds with inflectional than derivational affixes
- preference for compounds with the affixes on the head over the modifier (both inflection and derivation)
- affixes on both Ns significantly more acceptable with inflectional than derivational morphology

RESULTS: INFLECTION VS DERIVATION



- L1 Spanish speakers always significantly prefer the affix on the head
- L2 Spanish speakers have somewhat less clear preferences with respect to the head
 - trend in preference for *-s* on head vs both Ns
 - trend in preference for *-ito* on head vs modifier

DISCUSSION

**L1
&
L2**

preference	NN + inflection	NN + derivation
#1	-s on the head	-ito on the head
#2	-s on both Ns	-ito on the modifier
#3	-s on the modifier	-ito on both Ns

- both inflectional and derivational affixes are preferred on the head
 - both L1 and L2 Spanish speakers are sensitive to headedness, though the L2 speakers to a lesser extent
- plural on the modifier rated lowest for inflectional morphology
 - clearly the ungrammatical option in the theory

DISCUSSION

L1 & L2

preference	NN + inflection	NN + derivation
#1	-s on the head	-ito on the head
#2	-s on both Ns	-ito on the modifier
#3	-s on the modifier	-ito on both Ns

- *-ito* on both Ns rated lowest
 - semantic perspective:
 - stronger effect of redundancy with *-ito* than with *-s*
 - *-ito* carries more meaning
 - syntactic perspective:
 - unlike *-ito*, *-s* must be systematically marked in agreement
ie. *la*s *casas* *roja*s – *la*∅ *casita* *roja*∅

CONCLUSIONS

- L2 Spanish speakers seem to treat inflectional and derivational morphology the same with respect to headedness
 - both *-ito* and *-s* on the head were preferred over attachment to the modifier or both Ns
 - though note that this preference was only a trend in some cases
- headedness has a different status in the L1 and L2 grammars
 - headedness is ingrained in L1 Spanish speakers and the head of the compound has a privileged status
 - L2 Spanish speakers are not sensitive to headedness in Spanish
 - though their judgments resemble those of L1 speakers, they conceptualize the compounds differently
- Zwicky's (1988) proposal seems to be most in line with L1 Spanish speaker intuitions
 - only affixes on the head can have scope over the whole compound

FUTURE DIRECTIONS

- online tasks: a more refined way to examine the contrast between L1 and L2 speakers
 - eye-tracking: using a VWP with depictions manipulated with respect to the size of each N would give us both processing time information and provide insight into which type(s) of size manipulations are most relevant to each group of speakers
 - ERPs: would allow us to discern when the affixation of *-s* or *-ito* results in syntactic (P600) and in semantic (N400) violations and see whether this differs between L1 and L2 speakers
- further examine the semantics of derivational affixes
 - little vs cute
- look at the possible role of productivity
 - NN compounds not productive in Spanish but very productive in other languages such as English
- investigate inflectional and derivational morphology in other languages
 - double plural in French
 - other languages with evaluative affixes and productive NN compounds

THANK YOU!

¡GRACIAS!

Rachel Klassen

r.hm.klassen@gmail.com



@klassen_rachel

www.rachelklassen.com



Juana M. Liceras

Juana.Munoz-Liceras@uottawa.ca

<http://artsites.uottawa.ca/jmliceras/en>

ACKNOWLEDGEMENTS

Drawings by Terhi Salomaa

Language Acquisition Research Lab, uOttawa

