

H U M B O L D T - U N I V E R S I T Ä T Z U B E R L I N



## Unmarked word order in Korean and Spanish psych-verbs: Interaction of case, theta-roles, and event structures in HPSG

Antonio Machicao y Priemer & Paola Fritz-Huechante

25<sup>th</sup> International Conference on Head-Driven Phrase Structure Grammar (HPSG 2018)

July 2, 2018

# Contents

- 1 Introduction
- 2 Psych verbs: Spanish
- 3 Analysis of Spanish psych verbs
- 4 Psych verbs: Korean
- 5 Analysis of Korean psych verbs
- 6 Conclusions

# Introduction

## Psych verbs

verbs denoting a relation between two arguments: one argument bearing the theta role **experiencer** and the other **stimulus**

- (1) *love, like, fear, frighten*
- (2) [Peter]<sub>EXP</sub> fears [his boss/the storm]<sub>STM</sub>.

## Experiencer (EXP)

animate entity **affected** by a psychological eventuality

## Stimulus (STM)

+/- animate entity **triggering** the psychological state

- Psych verbs participate in a well-known alternation between EXP and STM:

- (3) a. [We]<sub>EXP</sub> puzzled over [Sue's remarks]<sub>STM</sub>. [ES]  
b. [Sue's remarks]<sub>STM</sub> puzzled [us]<sub>EXP</sub>. [EO]

(Landau, 2010)

- ES = Experiencer Subject
- EO = Experiencer Object

**ES**

(Grimshaw 1990; Landau 2010;  
Reinhart 2002; a.o.)

- (4) Peter<sub>NOM.EXP</sub> loves Maria<sub>ACC.STM</sub>.

- **canonical** w.r.t. linearization:  
 $\text{SUBJ}_{\text{NOM}, \text{AG}} > \text{OBJ}_{\text{ACC}, \text{PAT}}$
- **no psych-effects**
- **STM has no case alternation.**  
(... allegedly)

**EO**

(Arad 1998; Belletti and Rizzi 1988; Pesetsky 1995;  
Verhoeven 2010, 2014; a.o.)

- (5) Das Buch<sub>STM</sub> interessiert Maria<sub>ACC.EXP</sub>.  
'The book interests Maria' [EO<sub>ACC</sub>]
- (6) Maria<sub>DAT.EXP</sub> gefällt das Buch<sub>STM</sub>.  
'Maria likes the book' [EO<sub>DAT</sub>]

- **non-canonical** w.r.t. linearization

- **psych-effects** w.r.t. linearization,  
binding, extraction, ...
- EXP has frequently **case alternation**.
- correlation of **case marking**  
alternation and **linearization**

# Research Questions

- How can we model ...
  - ... the alternation of the experiencer (EO vs. ES),
  - ... the case alternation in EO structures (ACC vs. DAT),
  - ... the different readings of the STM, and
  - ... the different linearization patterns (unmarked word orders) shown for the distinct configurations?
- In order to answer those questions:
  - Spanish (SVO) & Korean (SOV)
  - Examine linearization (i.e. unmarked word order) in terms of:
    - Case alternation
    - Event structure
    - Theta-roles
  - HPSG framework

1 Introduction

2 Psych verbs: Spanish

3 Analysis of Spanish psych verbs

4 Psych verbs: Korean

5 Analysis of Korean psych verbs

6 Conclusions

# Psych verbs: Spanish

## Class 1: *gustar* ‘to like’ (EO)

- stative and non-agentive (cf. (7)) (Landau 2010; Reinhart 2002)
- unmarked WO: DAT-**EXP** > NOM-**STM**
- STM-role: **SM**

(7) [A Clara]<sub>DAT.EXP</sub> le gusta [David/el reporte]<sub>NOM.SM</sub>.  
to Clara CL.DAT like.PRS.3.SG David/the report  
'Clara likes David/the report.'

## Subject Matter (SM)

**Non-agentive** argument which **provokes** an emotional response in the **EXP**, but **does not cause** the emotion **directly**. (cf. Pesetsky, 1995; a.o.)

## Class 1 & 2: *asustar* ‘to frighten’ (EO)

- stative: DAT structure (cf. (8a))  
unmarked WO: DAT-**EXP** > NOM-**SM**
- eventive: ACC structure (cf. (8b))  
unmarked WO: NOM-**CSR** > ACC-**EXP**

(cf. Marín, 2011)

- (8) a. [A Clara]<sub>DAT.EXP</sub> le asusta [David/el reporte]<sub>NOM.SM</sub>.  
     to Clara           CL.DAT frighten.PRS.3.SG David/the report  
     ‘(Something about) David/the report frightens Clara.’
- b. [David/el reporte]<sub>NOM.CSR</sub> (la) asusta [a Clara]<sub>ACC.EXP</sub>.  
     David/the report       CL.ACC frighten.PRS.3.SG to Clara  
     ‘David/the report frightens (directly) Clara.’

## Causer (CSR)

**direct causer** of the emotion (cf. Pesetsky, 1995)

## Class 3 & 4: *amar* ‘to love’, *temer* ‘to fear’ (ES)

- stative: DAT structure (cf. (9a))  
unmarked WO for DAT structure: NOM-EXP > DAT-SM
- stative: ACC structure (cf. (9b))  
unmarked WO for ACC structure: NOM-EXP > ACC-TG

- (9) a. [ David]<sub>NOM.EXP</sub> (le) ama [ a Pedro]<sub>DAT.SM</sub>.  
David CL.DAT love.PRS.3.SG to Peter  
‘David loves (something about) Peter.’
- b. [ David]<sub>NOM.EXP</sub> (lo) ama [ a Pedro]<sub>ACC.TG</sub>.  
David CL.ACC love.PRS.3.SG to Peter  
‘David loves Peter.’

### Target (TG)

argument **evaluated** positively or negatively by the EXP (cf. Pesetsky, 1995)

# Summary – Spanish

	<b>type</b>	<b><math>\theta</math>-role &amp; case</b>		<b>eventuality</b>	<b>unmarked WO</b>	<b>class</b>
		<b>STM</b>	<b>EXP</b>			
<i>gustar</i>	EO	SM-NOM	DAT	state (–CoS)	<b>EXP-DAT &gt; SM-NOM</b>	1
<i>asustar</i>	EO	SM-NOM	DAT	state (–CoS)	<b>EXP-DAT &gt; SM-NOM</b>	1
		CSR-NOM	ACC	event (+CoS)	<b>CSR-NOM &gt; EXP-ACC</b>	2
<i>amar</i>	ES	TG-ACC	NOM	state (–CoS)	<b>EXP-NOM &gt; TG-ACC</b>	3
		?SM-DAT	NOM	state (–CoS)	<b>EXP-NOM &gt; SM-DAT</b>	4
<i>temer</i>	ES	?TG-ACC	NOM	state (–CoS)	<b>EXP-NOM &gt; TG-ACC</b>	3
		SM-DAT	NOM	state (–CoS)	<b>EXP-NOM &gt; SM-DAT</b>	4

- We propose – at least for Spanish – a **fourfold** classification of psych verbs (in contrast to the threefold classification proposed e.g. in Belletti and Rizzi 1988)
- The data suggest that
  - (not only) the **EXP** alternates w.r.t. case in **EO structures**
  - (but also that) the **STM** alternates w.r.t. case in **ES structures**

1 Introduction

2 Psych verbs: Spanish

3 Analysis of Spanish psych verbs

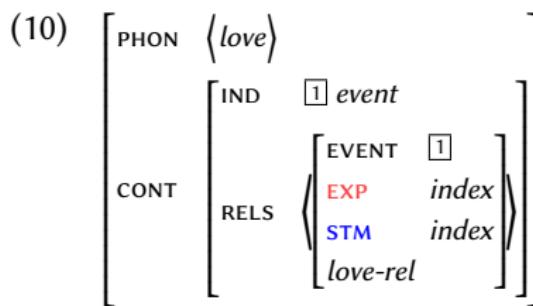
4 Psych verbs: Korean

5 Analysis of Korean psych verbs

6 Conclusions

# HPSG & psych-verbs

- In HPSG the treatment of  $\theta$ -roles is Davidsonian. (cf. Davidson, 1967; Koenig, 1999; Davis and Koenig, 2000; Copestake et al., 2005; Müller, 2013)



## Problems

- As already mentioned, psych verbs bear two  $\theta$ -roles: EXP and STM.
- STM can behave in different ways: target (TG) or subject matter (SM).
- ES psych verbs like *amar* ‘love’: case alternation w.r.t. the  $\theta$ -role (i.e. TG vs. SM)
- Underspecification** of  $\theta$ -roles in order to account for Spanish case alternation

# Theta-roles

- We are proposing to treat  $\theta$ -roles as **values** (and not as features).

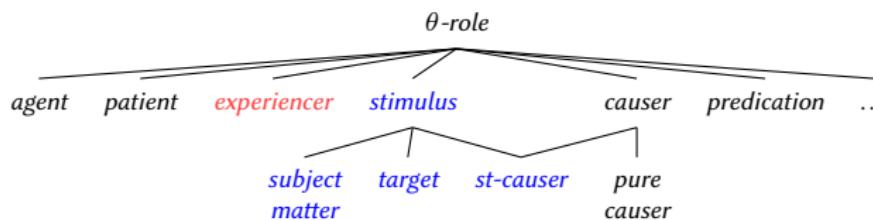


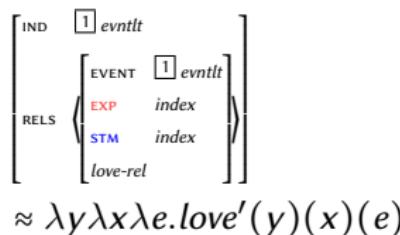
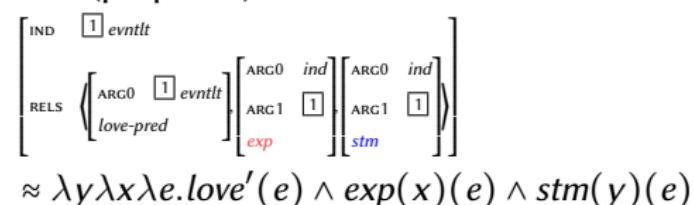
Figure: Type hierarchy for  $\theta$ -role

## Advantages:

- Generalisations about  $\theta$ -roles
- Generalisations about verb classes
- In a further state of the theory: Defining  $\theta$ -roles by feature-value pairs, accounting for the commonalities and differences between them.

# Restructuring

- Restructuring the `RELS` attribute
- Proposal of a **neo-davidsonian** structure for `RELS` (cf. Parsons, 1990; Copestake, 2006)

(11) *love*:(12) *love* (proposed)

- Neo-Davidsonian Approach: Possibility of **manipulation of arguments** without having to assume a *new predicate*.
- Useful for phenomena **altering the semantic valence of predicates**, without altering the core meaning of the predicate.

# HPSG & Spanish psych verbs

- Solving the problems *lexically* (and not by means of syntactic structure)

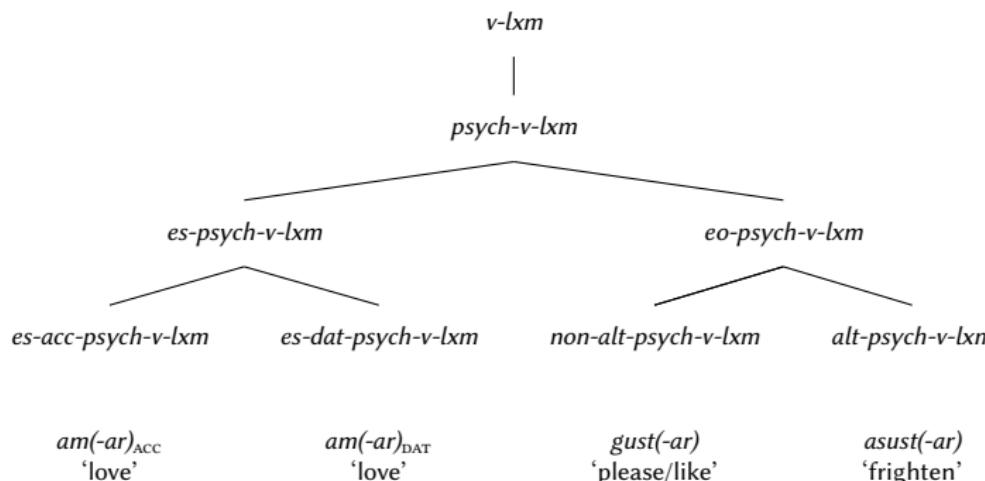


Figure: Psych-verb types in Spanish

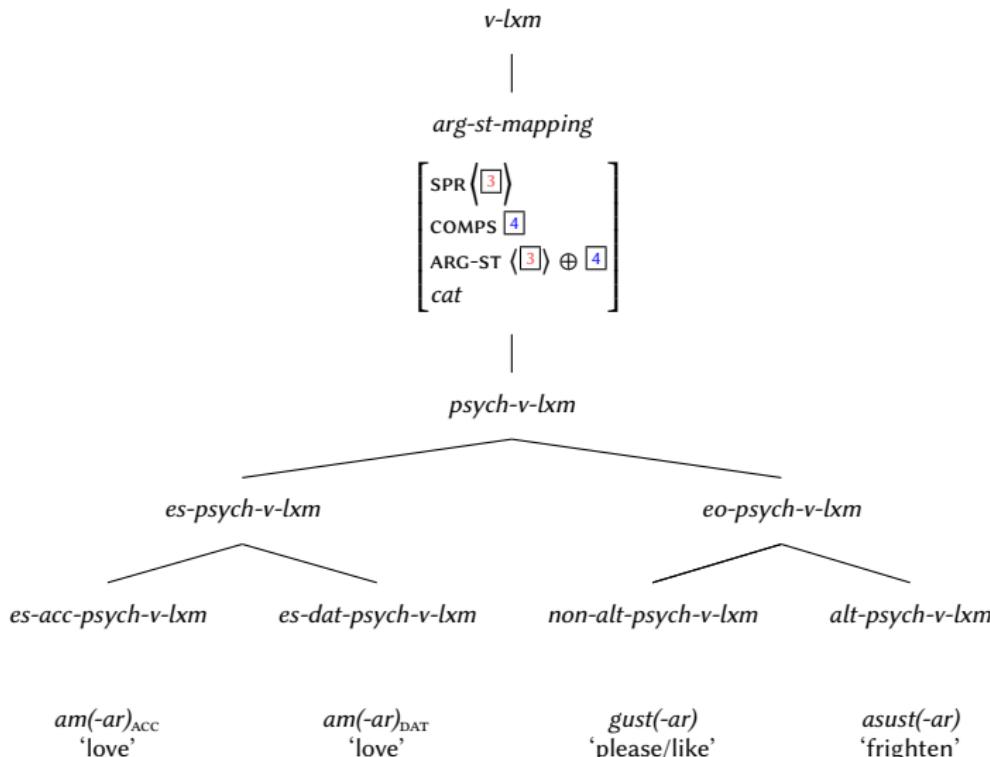
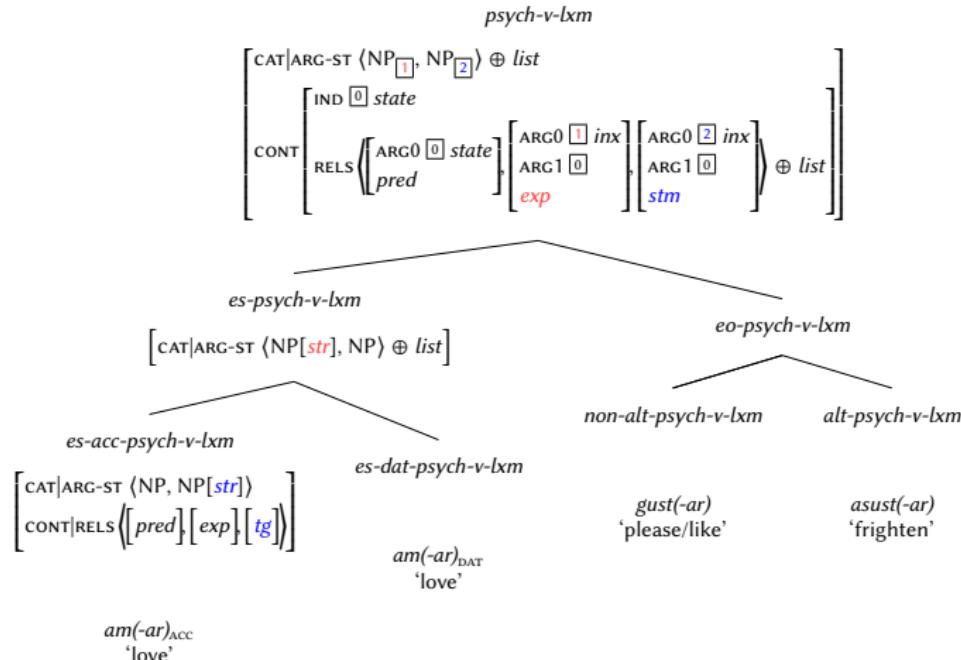
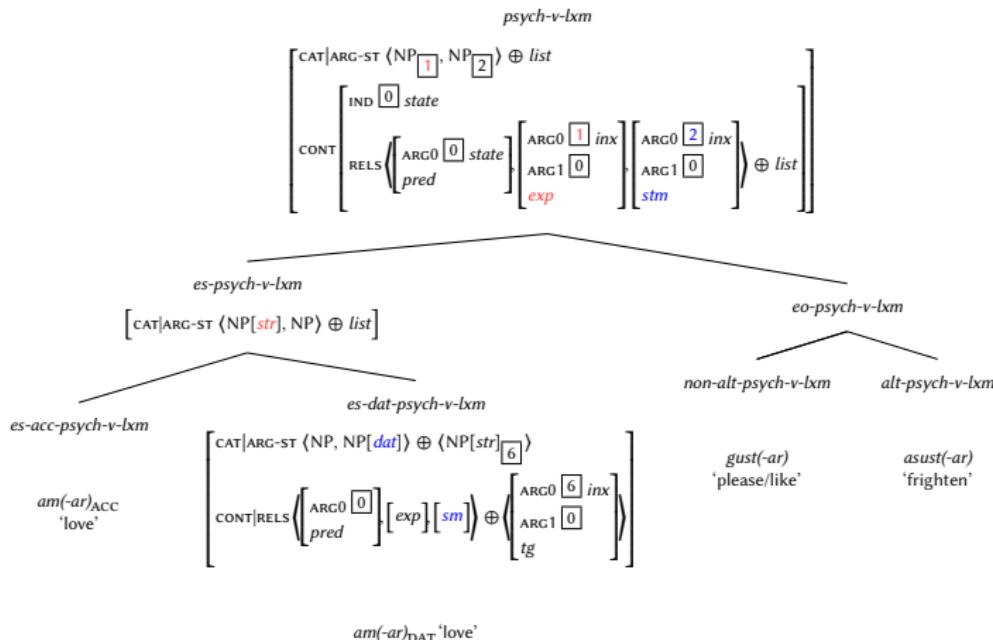


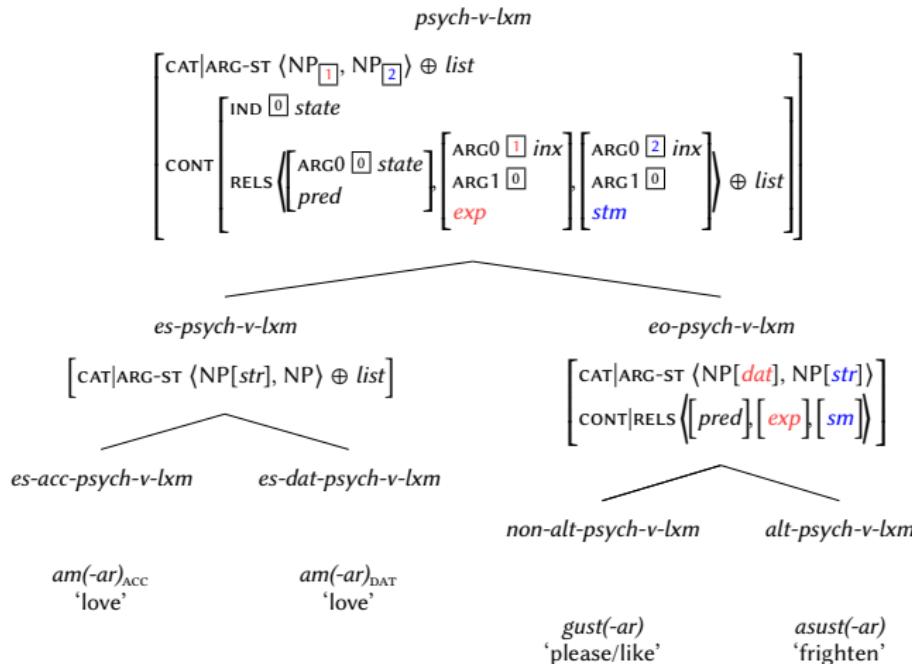
Figure: Psych-verb types in Spanish



- (13) Pedro la      ama      [ a Clara]<sub>ACC.TG</sub> (\*[ las manos]<sub>ACC.TG</sub>).  
 Pedro CL.ACC love.PRS.3.SG to Clara      the hands  
 ‘Pedro loves Clara (\*her hands).’



- (14) Pedro<sub>NOM.EXP</sub> le ama [a Clara]<sub>DAT.SM</sub> ([las manos]<sub>ACC.TG</sub>).  
 Pedro CL.DAT love.PRS.3.SG to Clara the hands  
 'Pedro loves something about Clara, (her hands).'

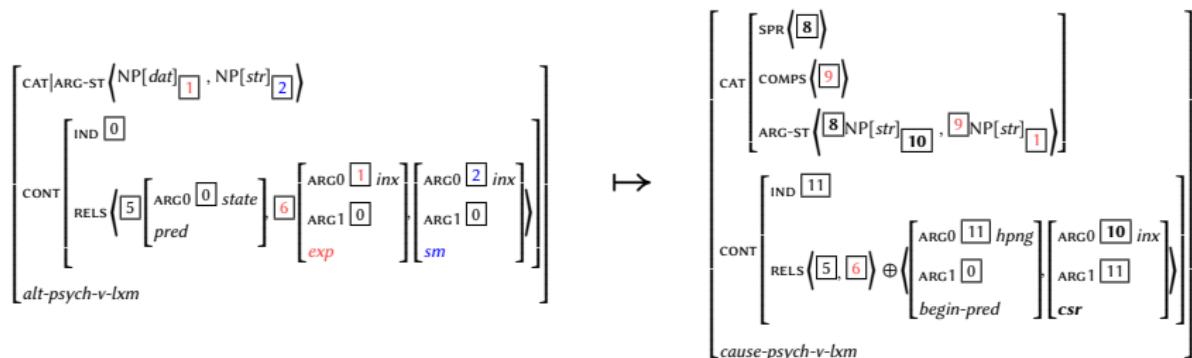


- (15) [A Clara]<sub>DAT.EXP</sub> le gusta [David/el reporte]<sub>NOM.SM.</sub>  
 to Clara CL.DAT like.PRS.3.SG David/the report  
 'Clara likes David/the report.'

So far, what is the inheritance hierarchy accounting for?

	type	$\theta$ role & case		eventuality	unmarked WO	class
		STM	EXP			
<i>gustar</i>	EO	SM-NOM	DAT	state (-CoS)	EXP-DAT > SM-NOM	1
<i>asustar</i>	EO	SM-NOM	DAT	state (-CoS)	EXP-DAT > SM-NOM	1
		CSR-NOM	ACC	event (+CoS)	CSR-NOM > EXP-ACC	2
<i>amar</i>	ES	TG-ACC	NOM	state (-CoS)	EXP-NOM > TG-ACC	3
		?SM-DAT	NOM	state (-CoS)	EXP-NOM > SM-DAT	4
<i>temer</i>	ES	?TG-ACC	NOM	state (-CoS)	EXP-NOM > TG-ACC	3
		SM-DAT	NOM	state (-CoS)	EXP-NOM > SM-DAT	4

- For *asustar* ‘to frighten’ we need a LR changing the case of the EXP and the unmarked word order.



- (16) [A Clara]<sub>DAT.EXP</sub> le asusta [David/el reporte]<sub>NOM.SM.</sub>  
 to Clara CL.DAT frighten.PRS.3.SG David/the report  
 '(Something about) David/the report frightens Clara.'

- (17) [David/el reporte]<sub>NOM.CSR</sub> (la) asusta [a Clara]<sub>ACC.EXP</sub>.  
 David/the report CL.ACC frighten.PRS.3.SG to Clara  
 'David/the report frightens (directly) Clara.'

1 Introduction

2 Psych verbs: Spanish

3 Analysis of Spanish psych verbs

4 Psych verbs: Korean

5 Analysis of Korean psych verbs

6 Conclusions

# Psych verbs: Korean

## Class 1: *mwusepta* ‘scary’ (AEP)

- stative and non-agentive (Choi 2015; Lee and Shin 2007)
- WO freezing effect (cf. (18)): NOM-**EXP** > NOM-**STM**
- STM-role: **SM**

(18) [Mina-ka/nun]<sub>EXP</sub> [kongpho yenghwa-ka / Minho-ka]<sub>SM</sub> mwusep-ta.  
Mina-NOM/TOP      horror      movie-NOM / Minho-NOM    scary-DECL  
‘Mina is scared of horror movies/Minho.’

## Agentive Experiencer Predicates (AEP)

Experiencer plays a role of agent in the experiential causing sub-event (Nam, 2015).

## Class 2 *mwusepta* ‘scary’ (AEP)

- stative and non-agentive
- free WO, but unmarked WO (cf. (19)): NOM-SM > DAT-EXP

(19) [kongpho yenghwa-ka/nun / Minho-ka/nun]<sub>SM</sub> [ Mina-eykey]<sub>EXP</sub> mwusep-ta.  
horror movie-NOM/TOP / Minho-NOM/TOP Mina-DAT scary-DECL  
'The horror movie/Minho is scary to Mina.'

### Class 3 *ccacungnata* ‘get irritated’ (PEP)

- inchoative (+change of state) (cf. Choi, 2015)
- WO freezing effect (cf. (20)): NOM-**EXP** > NOM-**TG**

(20) [Mina-ka/nun]<sub>EXP</sub> [Minho-ka / khun soli-ka]<sub>TG</sub> ccacungna-n-ta.  
Mina-NOM/TOP Minho-NOM / big noise-NOM get.irritated-PRS-DECL  
'Mina gets irritated at Minho/the big noise.'

### Patientive Experiencer Predicates (PEP)

Experiencer plays a role of patient or theme in the causing sub-event (Nam, 2015).

## Class 4 *ccacungnata* ‘get irritated’ (PEP)

- inchoative (+change of state)
- free WO, but unmarked WO (cf. (21)): NOM-**EXP** > DAT-**TG**

(21) [Mina-ka/nun]<sub>EXP</sub> [Minho-eykey / khun soli-ey]<sub>TG</sub> ccacungna-n-ta.  
Mina-NOM/TOP Minho-DAT / big noise-DAT get.irritated-PRS-DECL  
‘Mina gets irritated at Minho/the big noise.’

# Summary – Korean

	type	$\theta$ role & case		eventuality	unmarked WO	class
		STM	EXP			
<i>mwusepta</i>	AEP	SM-NOM	NOM	state (-CoS)	EXP-NOM > SM-NOM	1
		SM-NOM	DAT	state (-CoS)	SM-NOM > EXP-DAT	2
<i>ccacungnata</i>	PEP	TG-NOM	NOM	inch (+CoS)	EXP-NOM > TG-NOM	3
		TG-DAT	NOM	inch (+CoS)	EXP-NOM > TG-DAT	4

- Our proposal: a **fourfold** classification of psych verbs (in contrast to the literature, e.g. Kim 2008; Choi 2015 and Yang 1996)
- Considering Nam (2015)'s double classification of psych verbs (i.e. AEP vs. PEP), we **borrow** his case alternation patterns between NOM and DAT and correlate that in terms of theta-role assignment.

- Data demonstrate **NOM-NOM** structures are more limited in the psych domain (cf. Kim, 2008).
- More prominent alternation between **NOM** and **TOP** as structural case assignment (Yoon, 2004)
- As in Spanish, there is an alternation in case for both **EXP** and **STM**.
- Asymmetry in case marking correlates with the theta-role of the **STM**, but **not** with sub-event causation (cf. Nam 2015).
  - *mwusepta* ‘scary’ class (i.e. AEP): includes adjectives taking **SM** as arguments.
  - *ccacungnata* ‘get angry’ class (i.e. PEP): includes verbal inherently inchoative items with a **BECOME** operator (cf. Choi and Demirdache 2014), taking **TG** as arguments.

1 Introduction

2 Psych verbs: Spanish

3 Analysis of Spanish psych verbs

4 Psych verbs: Korean

5 Analysis of Korean psych verbs

6 Conclusions

# Analysis of Korean psych verbs

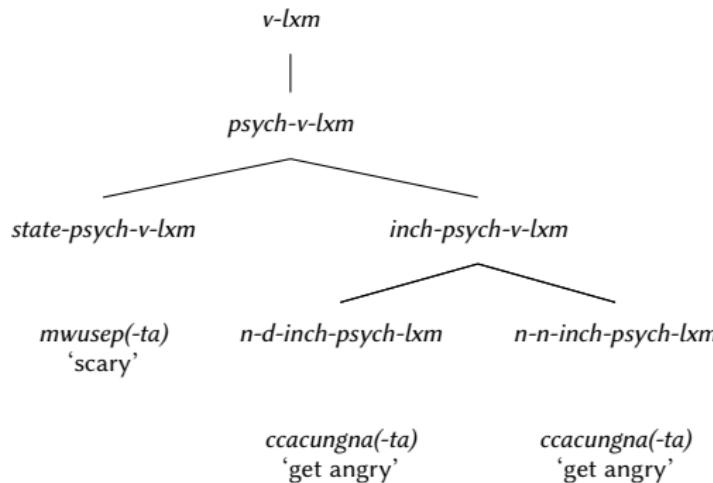


Figure: Psych-verb types in Korean

# Analysis of Korean psych verbs

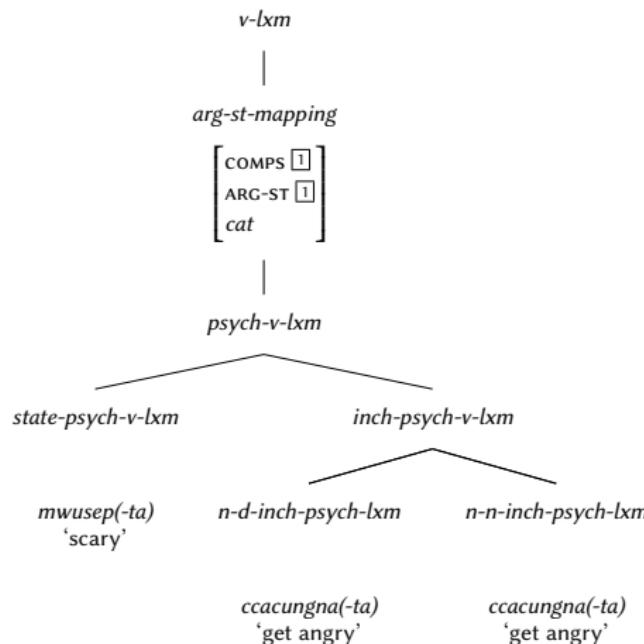
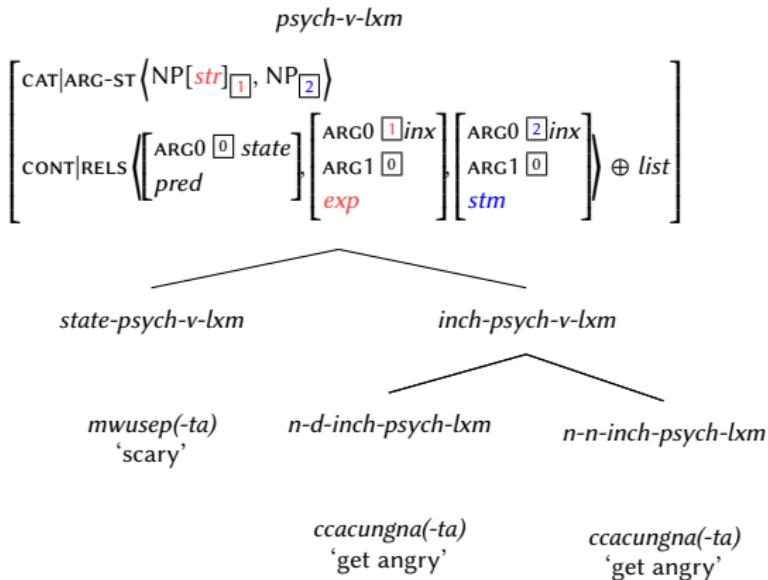
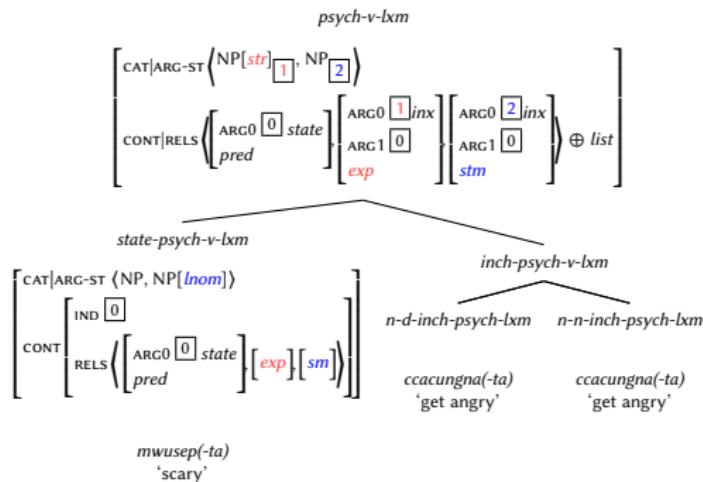
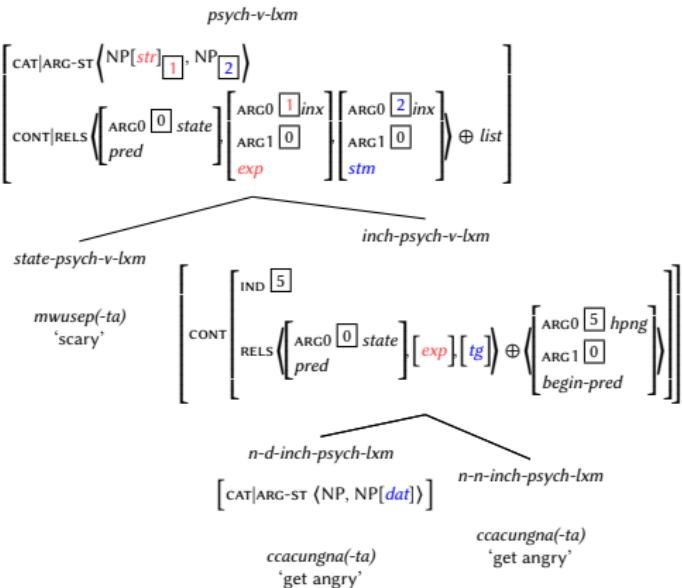


Figure: Psych-verb types in Korean

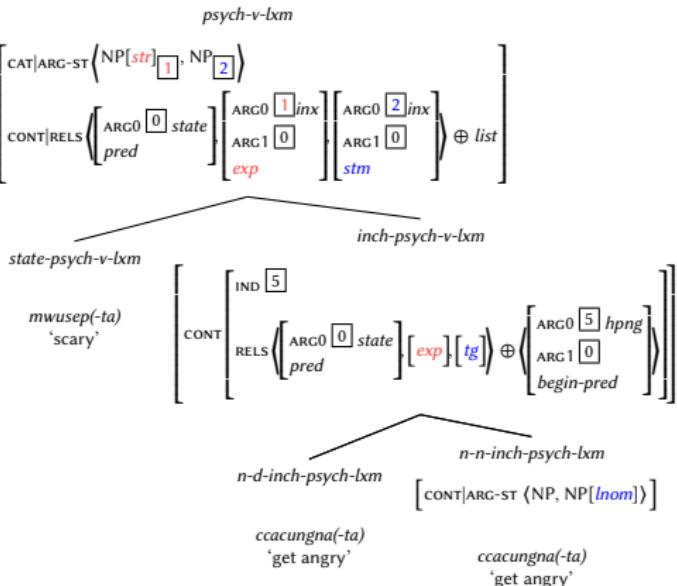




- (22) [Mina-ka/nun]<sub>EXP</sub> [kongpho yenghwa-ka / Minho-ka]<sub>SM</sub> mwusep-ta.  
 Mina-NOM/TOP      horror      movie-NOM / Minho-NOM    scary-DECL  
 'Mina is scared of horror movies/Minho.'



- (23) [Mina-ka/nun]<sub>EXP</sub> [Minho-eykey / khun soli-ey]<sub>TG</sub> ccacungna-n-ta.  
 Mina-NOM/TOP Minho-DAT / big noise-DAT get.irritated-PRS-DECL  
 'Mina gets irritated at Minho/the big noise.'

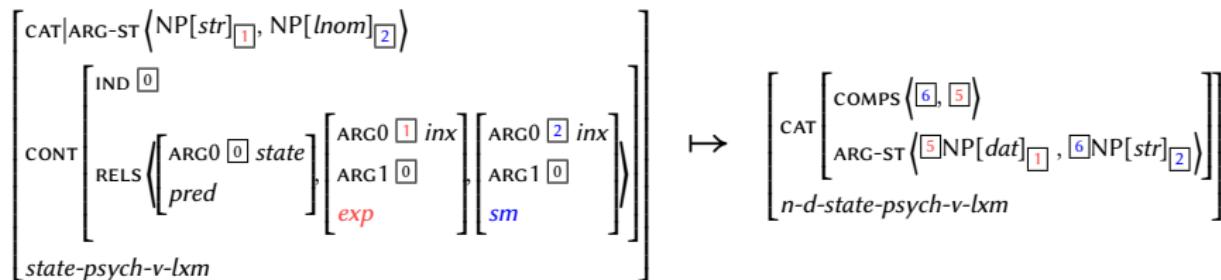


- (24) [Mina-ka/nun]<sub>EXP</sub> [Minho-ka / khun soli-ka]<sub>TG</sub> ccacungna-n-ta.  
 Mina-NOM/TOP Minho-NOM / big noise-NOM get.irritated-PRS-DECL  
 'Mina gets irritated at Minho/the big noise.'

So far, what is the inheritance hierarchy accounting for?

	<b>type</b>	<b><math>\theta</math> role &amp; case</b>		<b>eventuality</b>	<b>unmarked WO</b>	<b>class</b>
		<b>STM</b>	<b>EXP</b>			
<i>mwusepta</i>	AEP	SM-NOM	NOM	state (-CoS)	<b>EXP-NOM &gt; SM-NOM</b>	<b>1</b>
		SM-NOM	DAT	state (-CoS)	<b>SM-NOM &gt; EXP-DAT</b>	<b>2</b>
<i>ccacungnata</i>	PEP	TG-NOM	NOM	inch (+CoS)	<b>EXP-NOM &gt; TG-NOM</b>	<b>3</b>
		TG-DAT	NOM	inch (+CoS)	<b>EXP-NOM &gt; TG-DAT</b>	<b>4</b>

- For *mwusep(-ta)* ‘be scared’ we need a **LR** changing the case of the **EXP** and of the **stm**, and the unmarked word order.



- (25) [Mina-ka/nun]<sub>EXP</sub> [kongpho yenghwa-ka / Minho-ka]<sub>SM</sub> mwusep-ta.  
 Mina-NOM/TOP      horror      movie-NOM / Minho-NOM    scary-DECL  
 ‘Mina is scared of horror movies/Minho.’
- (26) [kongpho yenghwa-ka/nun / Minho-ka/nun]<sub>SM</sub> [Mina-eykey]<sub>EXP</sub> mwusep-ta.  
 horror      movie-NOM/TOP / Minho-NOM/TOP      Mina-DAT      scary-DECL  
 ‘The horror movie/Minho is scary to Mina.’

1 Introduction

2 Psych verbs: Spanish

3 Analysis of Spanish psych verbs

4 Psych verbs: Korean

5 Analysis of Korean psych verbs

6 **Conclusions**

# Conclusions

- A **fourfold** categorization of psych verbs for both Spanish and Korean represents better the data (contra the classic two-/threefold views proposed e.g. by Belletti and Rizzi 1988 and Nam 2015).
- Not only the **EXP** alternates in case marking (Sp. DAT/ACC and Kr. NOM/DAT), but also the **STM** does (Sp. DAT/ACC and Kr. NOM/DAT).
- Unmarked word order: the result of the interaction of **event(ualities)**, **theta-roles** and **case marking**.
- **EXP**-first can be predicted by means of constraints in the type hierarchy:
  - ➊ for Spanish and Korean: *arg-st-mapping*
- **STM/CSR**-first is predicted by a LR for both languages:
  - ➊ for Spanish: *cause-psych-v-lxm*
  - ➋ for Korean: *n-d-state-psych-lxm*

# Literature I

- Arad, M. (1998). Psych-notes. *UCL Working Papers in Linguistics* 10, 1–22.
- Belletti, A. and L. Rizzi (1988). Psych-verbs and  $\theta$ -theory. *Natural Language and Linguistic Theory* 6(3), 291–352.
- Choi, J.-B. (2015). On the universality of aspectual classes: Inchoative states in Korean. pp. 123–135. Leiden: Brill Rodopi.
- Choi, J.-B. and H. Demirdache (2014). Reassessing the typology of states evidence from Korean (degree) inchoative states. *Workshop on the Ontology and the Typology of States*.
- Copestake, A. (2006). Robust minimal recursion semantics. Ms.
- Copestake, A., D. P. Flickinger, C. Pollard, and I. A. Sag (2005). Minimal Recursion Semantics: An introduction. *Research on Language and Computation* 3(4), 281–332.
- Davidson, D. (1967). The logical form of action sentences. In N. Resher (Ed.), *The Logic of Decision and Action*, pp. 81–95. Pittsburgh: University of Pittsburgh Press.
- Davis, A. and J.-P. Koenig (2000). Linking as constraints on word classes in a hierarchical lexicon. *Language* 76(1), 56–91.
- Gattein, C., M. Dickey, A. Wainselboim, and L. París (2015). The thematic hierarchy in sentence comprehension: A study on the interaction between verb class and word order in Spanish. *The Quarterly Journal of Experimental Psychology* 68(10), 1981–2007.

## Literature II

- Grimshaw, J. (1990). *Argument Structure*. Cambridge: MIT Press.
- Jiménez-Fernández, A. and B. Rozwadowska (2017). On the subject properties of datives in psych predicates: A comparative approach. *Acta Lingüística Académica* 64(2), 233–256.
- Kim, I. (2008). *On the NOM-DAT Alternation of Experiencer in Korean: A Conceptual Semantics Approach*. Ph. D. thesis, Seoul, Korea.
- Koenig, J.-P. (1999). *Lexical Relations*. Stanford: CSLI Publications.
- Landau, I. (2010). *The Locative Syntax of Experiencers*. London: MIT Press.
- Lee, S. and K. Shin (2007). On the exp-subj psych-verbs: A lexicalist approach. *The Linguistic Association of Korea Journal* 15(2), 39–58.
- Marín, R. (2011). Casi todos los predicados psicológicos son estativos. In A. Carrasco (Ed.), *Sobre estados y estatividad*, pp. 26–44. München: Lincom.
- Müller, S. (2013). *Head-Driven Phrase Structure Grammar: Eine Einführung*. Tübingen: Stauffenburg.
- Nam, S. (2015). Lexical semantics: Lexicon-syntax interface. pp. 157–178. Hoboken: John Wiley & Sons.
- Parsons, T. (1990). *Events in the Semantics of English: A Study in Subatomic Semantics*. Cambridge: MIT Press.
- Pesetsky, D. (1995). *Zero Syntax: Experiencers and cascades*. Cambridge: MIT Press.

## Literature III

- Primus, B. (2004). Protorollen und verbtyp: Kasusvariatioen bei psychischen verben. In R. Kailuweit and M. Hummel (Eds.), *Semantische Rollen*, pp. 377–401. Tübingen: Narr.
- Reinhart, T. (2002). The theta system: An overview. *Theoretical Linguistics* 28(3), 229–290.
- Temme, A. and E. Verhoeven (2016). Verb class, case, and order: A cross-linguistic experiment on non-nominative experiencers. *Linguistics* 54(4), 769–814.
- Verhoeven, E. (2010). Transitivity in Chinese experiencer object verbs. In P. Brandt and M. García García (Eds.), *Transitivity: Form, Meaning, Acquisition, and Processing*, pp. 95–118. Amsterdam: Benjamins.
- Verhoeven, E. (2014). Thematic prominence and animacy asymmetries. evidence from a cross-linguistic production study. *Lingua*, 129–161.
- Yang, B. (1996). Syntax-semantics interface in psych-verb constructions: A Role and Reference Grammar approach. *Modern Grammar* 7, 171–207.
- Yoon, J. (2004). Non-nominative (major) subjects and case stacking in Korean. In P. Bhaskararao and K. V. Subbarao (Eds.), *Non-nominative subjects*, pp. 265 –314. Amsterdam: John Benjamins.

# Spanish

## Class 1 (EO)

***eo-psych-v-lxm***

e.g. *gustar* ‘like’, *asustar* ‘frighten’

- STM → SM
- EXP → DAT
- uWO EXP > SM

## Class 2 (EO)

***alt-psych-v-lxm + LR***

e.g. *asustar* ‘frighten’

- state → happening
- CSR
- EXP → ACC
- uWO CSR > EXP

## Class 4 (ES)

***es-dat-psych-v-lxm***

e.g. *amar* ‘love’

- STM → SM
- optionally TG
- SM → DAT
- uWO EXP > SM

## Class 3 (ES)

***es-acc-psych-v-lxm***

e.g. *amar* ‘love’

- STM → TG
- no extra argument
- TG → ACC
- uWO EXP > TG

# Korean

## Class 1

### *state-psych-v-lxm*

- state
- STM → SM
- no extra argument

### *exp-psych-v-lxm*

- uWO EXP > SM

### *n-n-state-psych-lxm*

e.g. *mwusepta* ‘scary’

- EXP → NOM
- SM → NOM

## Class 3

### *inch-psych-v-lxm*

- state → happening
- STM → TG
- no extra argument

### *exp-psych-v-lxm*

- uWO EXP > SM

### *n-n-inch-psych-lxm*

e.g. *ccacungnata* ‘get angry’

- EXP → NOM
- SM → NOM

# Korean

## Class 2

***n-d-state-psych-lxm***

e.g. *mwusepta* ‘scary’

- EXP → DAT
- SM → NOM
- uWO SM > EXP

## Class 4

***exp-psych-v-lxm***

- uWO EXP > SM

***n-d-inch-psych-lxm***

e.g. *ccacungnata* ‘get angry’

- EXP → NOM
- TG → DAT

# Spanish Dative vs. Spanish Benefactive

**Benefactive:** The Spanish dative in psych constructions is **not** a benefactive.

- Semantic interpretation:
  - The benefactive argument is interpreted as getting some benefit out of the verbal event (cf. (27)).

(27) Pedro le        cargó            [las maletas]<sub>ACC</sub> [a Clara]<sub>DAT.BEN</sub>.  
Pedro CL.DAT carry.PRT.3.SG the suitcases to Clara

‘Pedro carried the suitcases for Clara.’

*Interpretation:* Pedro transported the suitcases on behalf of Clara.

# Spanish Dative vs. Spanish Benefactive

- Semantic interpretation:

- The dative argument with psych verbs is a non-agentive argument provoking an emotional response (i.e. SM) in the EXP (cf. (28))

(28)

[Pedro] <sub>NOM.EXP</sub>	le	ama	[las manos] <sub>ACC.TG</sub>	[a Clara] <sub>DAT.SM</sub> .
Pedro	CL.DAT	love.PRS.3.SG	the hands	to Clara

‘Pedro loves the hands to Clara.’

*Interpretation:* Clara is Pedro’s source of love, without her necessarily doing anything to evoke love in Pedro.

# Spanish Dative vs. Spanish Benefactive

- In constructions with a benefactive, the **do** cannot be left out (cf. (29a)). In dative ones, the **do** can be left out (cf. (29b)).

- (29) a. Pedro le      cargó       $[*(\text{las maletas})]_{\text{ACC}}$   $[\text{a Clara}]_{\text{DAT.BEN}}$ .  
Pedro CL.DAT carry.PRT.3.SG the suitcases to Clara  
‘Pedro carried the suitcases for Clara.’
- b.  $[\text{Pedro}]_{\text{NOM.EXP}}$  le      ama       $[(\text{las manos})]_{\text{ACC.TG}}$   $[\text{a Clara}]_{\text{DAT.SM}}$ .  
Pedro CL.DAT love.PRS.3.SG the hands to Clara  
‘Pedro loves the hands to Clara.’

# Stativity

- Traditionally, studies have used Dowty's (1979) tests in order to differentiate between states and other eventualities.
- One of the properties of states: considered atelic (a.o)
- Tests for telicity:
  - *in x time* measures the smallest interval during which the described eventuality takes place.
  - *for x time* is compatible with predicates that do not possess an endpoint.

# Stativity – Spanish

- Spanish psych verbs are stative.

- (30) Pedro amó a Clara durante/\*en toda su vida.  
Pedro love.PRT.3.SG to Clara during/in all his life  
'Pedro loved Clara for/\*in all his life.' [ES]
- (31) A Pedro le gustó Clara durante/\* en toda su vida.  
to Pedro CL.DAT like.PRT.3.SG Clara during/in all his life  
'Pedro liked Clara for/\*in all his life.' [ES]

# Stativity – Spanish

- (32) a. A Pedro le asustó Clara durante/\*en toda la tarde.  
to Pedro CL.DAT frighten.PRT.3.SG Clara during/in all the afternoon  
'Clara frightened Pedro for/\*in all the afternoon.' [EO – DAT]
- b. A Pedro la asustó Clara durante/\*en toda la tarde.  
to Pedro CL.ACC frighten.PRT.3.SG Clara during/in all the afternoon  
'Clara frightened Pedro for/\*in all the afternoon.' [EO – ACC]

- In 32a, the dative structure denotes a stative reading.
- in 32b, the *for*-adverbial captures the inchoativity of the verb, eliciting an interative reading.
- This change in eventuality is done with a LR in HPSG.

## Stativity – Korean