

Are adpositional phrases any other than adjuncts?

A case study on the argument structure of Basque motion verbs

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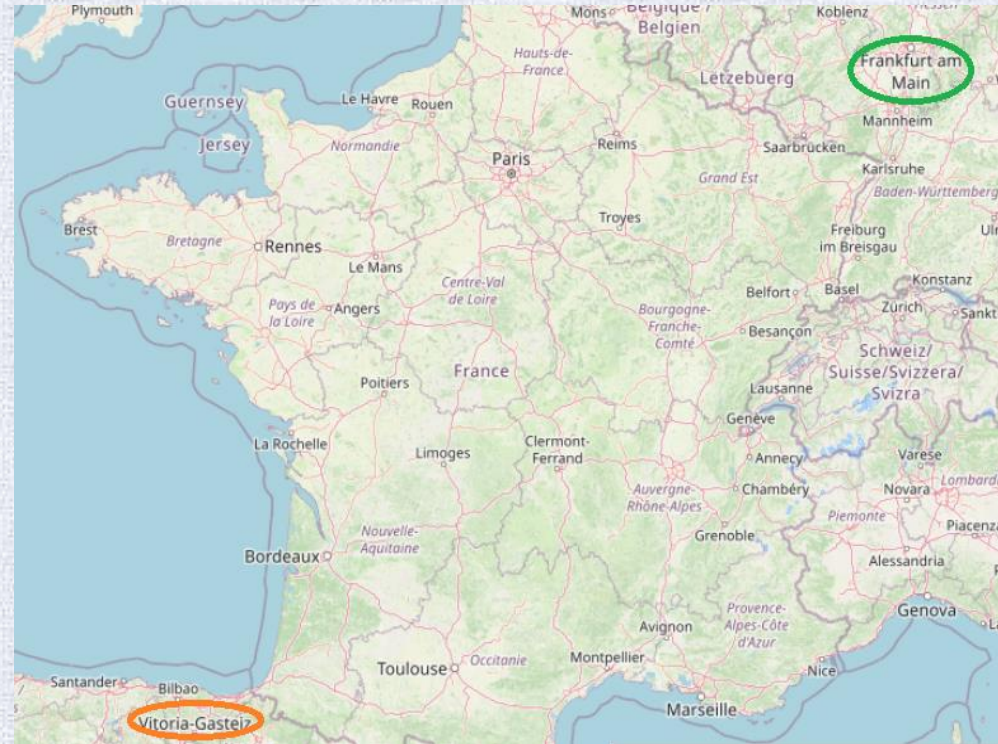
A brief personal Introduction

Education programs

- **Basque Studies & Philology (BA) (EHU) 2016-20 in Vitoria-Gasteiz**
- **Theoretical and Experimental Linguistics (MA) (EHU) 2020-21**
- **Doctorate program in Linguistics (EHU) 2022-**

Research topics

- **Morphosyntax of P**
- **Source-Goal asymmetries**
- **Word order in motion verbs**
- **Argument structure in motion V**



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Are adpositional phrases adjuncts? Arguments?

(1) a. She gave a talk.

b. She gave a talk in the library.

c. *She gave in the library.

NP/DP > Arguments

PP > Adjuncts

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NP/DP > Arguments

PP > Adjuncts

S V (PP)

S V O (PP)

S V DO IO (PP)

Intransitive V

Transitive V

Ditransitive V

- Leaving aside applicatives, passives, antipassives...

Are adpositional phrases adjunct? Arguments?

(2) a. I cut the bread thin.

b. I cut the bread into slices.

c. I cut the bread slowly.

Are adpositional phrases adjunct? Arguments?

(2) a. I cut the bread thin.

S V O AdjP

Resultative Adjuncts

b. I cut the bread into slices.

S V O PP

c. I cut the bread slowly.

S V O AdvP

(Baker, 2003: 313)

Same for all kind of verbs?

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S V O AdvP

(Baker, 2003: 313)

Same for all kind of verbs?

(3) a. I **read** the report at home.

Action V

b. I **read** the report.

(4) a. The accident **occurred** in the corner.

Event V

b. *The accident **occurred**.

(5) a. The stew **is** in the oven.

Location & Event V

b. *The stew **is**.

(Pullum & Huddleston, 2002: 680)

Cross-linguistic overview

- Prepositional arguments vs prepositional adjuncts in English

(6) a. Marianne sent a letter.	Agent-Theme
b. Marianne sent a letter to Leipzig.	Agent-Theme-Goal
c. Marianne sent a letter for Martin.	Agent-Theme-Benefactive
d. Marianne sent a letter to Lukas.	Agent-Theme-Recipient
e. Marianne sent a letter to Lukas to Leipzig.	A-Th-Recipient-Goal
f. Marianne sent Lukas a letter to Leipzig.	A-Recipient-Th-Goal
g. Marianne sent a [letter for Lukas] to Leipzig.	A-[Th-Benefact]-Goal
h. ?Marianne sent a letter to Lukas to Leipzig for Martin	A-Th-R-Goal-Ben
i. *Marianne sent to Leipzig/to Lukas/ for Martin.	Theme

- What is the argument structure for transference verbs & motion verbs?

Cross-linguistic overview

German

(7) a. Ich bringe brot.

Agent-Theme

b. Ich bringe brot nach hause.

Agent-Theme-Goal

c. Ich bringe brot für Laura.

Agent-Theme-Benefactive

d. Ich bringe Laura brot.

Agent-Theme-Recipient

e. Ich bringe Laura brot nach hause.

A-Recip-Theme-Goal

f. Ich bringe Laura brot nach hause für Jan.

A-Recip-Th-Goal-Ben

g.?? Ich bringe Jan zu Laura nach hause.

Agent-Th-Goal-Goal

i. *Ich bringe nach hause.

Theme

- What is the argument structure for transference verbs & motion verbs?

Argument structure in Basque

Typological description

- Structurally head-final (postpositions), agglutinative and ergative language
- SOV word order > not free, but flexible

A O IO
A O
S

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Agreement (argument-verb)

(8) a. Gu kale-an ga-bil-tza.
1.PL street-LOC 1-walk-PL
'We walk on the street.'

Subject-verb intransitive

b. Zu-e-k ni na-kar-zu-e.
2-PL-ERG 1.SG.ABS 1.SG-bring-2-PL
'You bring me.'

S-DO-verb transitive

c. Zu-e-k gu-ri ogi-a da-kar-ki-gu-zu-e.
2-PL-ERG 1.PL-DAT bread-DET PR/3.SG-bring-1.PL-2-PL
'You bring us the bread.'

S-IO-DO-V transitive

Canonical word order in Basque

Non-focalised order:

S V

S DO V

S IO DO V

S (PP) IO DO V

- There is not PP-Verb agreement, but certain Verbs require PPs

(9) a. Jone haurzaro-a-z gogora-tzen da.

Jone.ABS childhood-DET-INST remember-IMP BE

'Jone remembers about the childhood'

b. *Jone gogorätzen da.

(10) a. Zu unibertsitate-ra z-oa-z.

You.ABS university-ALL 2-go-PL

'You go to the university'

b. *Zu zoaz.

Argument structure in Basque

- Certain Goal PPs are preferred closer to V over DO & IO arguments

(11) a. Jone-k gutuna-a Bilbo-ra bidali du.
Jone-ERG letter-DET Bilbao-ALL send has
'Jone has sent a letter to Bilbao'

b. !Jone-k gutuna bidali du.

c. *Jone-k Bilbo-ra bidali du.

- Goal PPs vs Goal IO in dispute

(12) a. Jone Mikel-i etxe-ra gerturatu za-i-o.
Jone.ABS Mikel-DAT house-ALL approach 2-BE-3.SG
'Jone approached to Mikel to home'

b. Jone etxera gerturatu zaio Mikeli. [Preferred]

c. Jone Mikeli gerturatu zaio.

d. Jone etxera gerturatu zaio.

Assigning theta-roles

- Baker's (1988) *Uniformity of Theta Assignment Hypothesis*: if both express the same thematic relations, they have to share the same representation level in structure.

Original argument order (PPs)
Theme > Goal/Benefactive

Derived argument order (Dative IOs)
Goal/Benefactive > Theme

(Arregi & Ormazabal, 2003: 125)

- Basque displays 1) Dative IO *-ri* 2) Allative PP *-ra* 3) Destinative PP *-entzat*

Goal
Recipient
Benefactive

Goal

Recipient
Benefactive

(13) a. Joni haur-en-tzat bixkotx-ak egin d-i-zki-o-t.
Jon-DAT children-PL-DEST biscuit-PL make 3-HAVE-PL-3.DAT-1.ERG
'I made Jon biscuits for children'

b. Joni bixkotxak egin dizkiot haurrentzat.

(Oyharçabal, 2007)

Goal-Source asymmetries

- Certain verbs express a displacement to a given endpoint (Goal-Oriented)
jaurti 'throw', *bidali* 'send', *eraman* 'carry'
- Other verbs express a displacement from a starting point (Source-Oriented)
jaso 'receive', 'catch', 'collect', *ekarri* 'bring'
- Goal-oriented PPs are cognitively easier to process (Landau & Lakusta, 2005).
- A higher use of Goal-oriented V and PPs than Source-Oriented ones in children (3-4) and adult speech (Landau & Lakusta, 2005).

Goal-Oriented	Frequency	Source-Oriented
<i>Give the flowers <u>to</u> the woman</i> (<i>give, throw</i>)	>	<i>Receive the flowers <u>from</u> the man</i> (<i>get, catch</i>)
		(Lakusta, 2010)

Research Questions

- What is the argument structure for transference verbs & motion verbs?
- Why PPs without verb agreement are preferred closer to V than objects?
- If there are argument PPs in motion verbs, which theta-roles can they express?
- How many interrelated theta-roles (Goal, Benefactive, Recipient) can co-occur?
- Why can the same adposition be?
 - Obligatory: *Ni etxe-an nago* 'I am at home' (vs **Ni nago*)
 - Optional: *Nik (goiz-ean) ogia erosi dut* 'I bought bread (this morning)'

Experiment I

- **Choice task experiment (item ordering task)**
- **Conducted Online in IbexFarm & Google Forms (Jul-Aug 2021)**
- **Hypothesis I: Goal PPs (*to*) are more likely placed in argument position than Source PPs (*from*), in peripheral positions.**
- **Hypothesis II: In complex ditransitive motion verbs there is a dispute for the argument position between DO, IO and Goal PPs.**

Method

Participants (32) Basque-other L bilinguals aged 20-50 (*Me*= 23)

- **Basque-Spanish early bilinguals (14)**
- **Basque monolingual childhood (11)**
- **Basque-French early bilinguals (3)**
- **Basque-Spanish-French multilinguals (3)**
- **Spanish monolingual childhood (1)**

Experiment I

Materials

- **Transitives**

8 sentences including a Goal PP [S, V, DO, GPP]

8 sentences including a Source PP [S, V, DO, SPP]

- **Ditransitives**

8 sentences including either a Goal or a Source PP [S, V, IO, DO, GPP/SPP]

8 sentences including Goal & Source PPs [S, V, IO, DO, GPP, SPP]

Experiment I

Materials

- **Transitives**

- 8 sentences including a Goal PP [S, V, DO, GPP]

- 8 sentences including a Source PP [S, V, DO, SPP]

- **Ditransitives**

- 8 sentences including either a Goal or a Source PP [S, V, IO, DO, GPP/SPP]

- 8 sentences including Goal & Source PPs [S, V, IO, DO, GPP, SPP]

Stimuli

- Sentences one by one, S_ _ _ _ other elements presented randomly
- Participants were asked to order the elements and place them in “natural” order

Results

Transitives

Jonek ogia etxera darama

S DO GPP V

25 (75,8 %)

Jonek etxera ogia darama

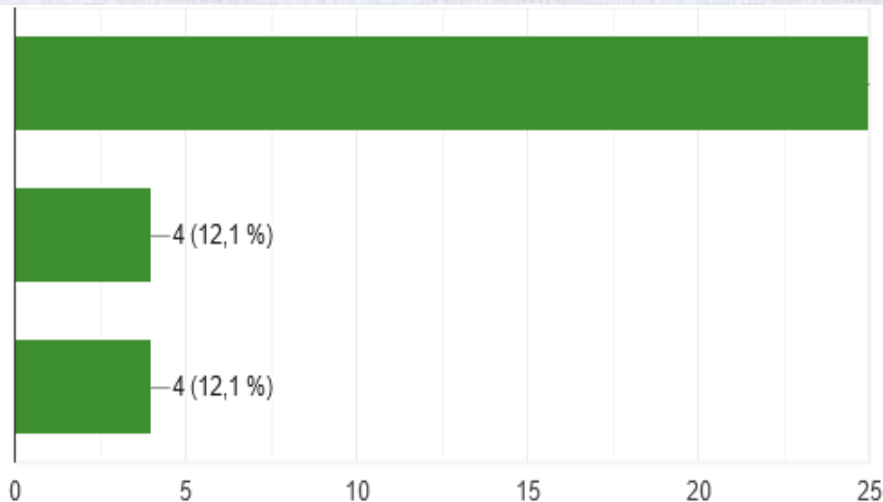
S GPP DO V

4 (12,1 %)

Jonek darama ogia etxera

S V DO GPP

4 (12,1 %)



DO-Goal PP-V

24/32 75%

Anek ekarri du dendatik ogia

S V SPP DO

3 (9,1 %)

Anek ogia dendatik ekarri du

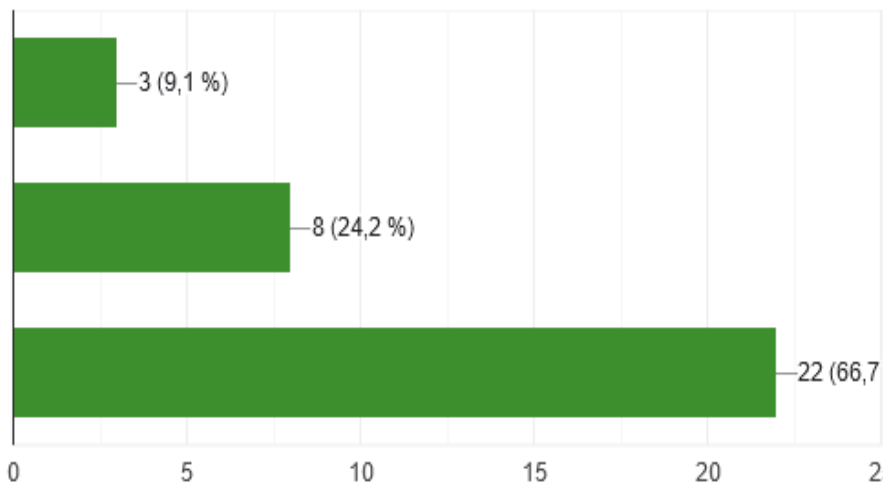
S DO SPP V

8 (24,2 %)

Anek dendatik ogia ekarri du

S SPP DO V

22 (66,7 %)



DO-Source PP-V

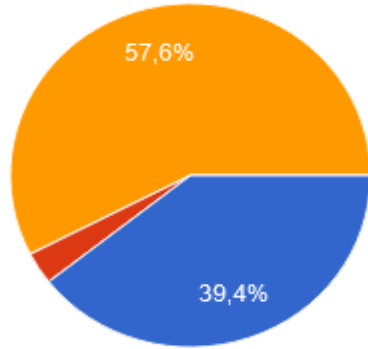
8/32 25%

Source PP-DO-V

22/32 68%

Results

Ditransitives



- Olatzek Joni Santurtzitik Bilbora sardinak ekarri dizkio.
- Olatzek Santurtzitik Bilbora Joni sardinak ekarri dizkio.
- Olatzek Joni sardinak Santurtzitik Bilbora ekarri dizkio.

IO-Source-Goal-DO
Source-Goal-IO-DO
IO-DO-Source-Goal

OLATZ

JON



Conclusions

- Hypothesis I: Goal PPs are placed next to V 3/4 times, while Source PPs 1/4 times > Goal PPs are part of argument structure in transitive motion verbs
- Hypothesis II: In complex ditransitive motion verbs:
 - To solve IO (Benefactive) & Goal PP dispute, IO next to S; GPP closer to V
 - Goal PPs part of the argument structure

Experiment II

- Preference task experiment (multiple choice task)
- Conducted online using IbexFarm (Jan 2022)
- Hypothesis I: Goal PPs are as fundamental as Themes in the argument structure of motion & displacement verbs > _V
- Hypothesis II: if Source & Goal PPs co-occur, Goal attracts Source to _V and DO will not be placed next to the verb .

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Method

Participants (28) Basque bilinguals, 16 F & 12 M, aged 21-62 (*Me*= 24)

- Basque-Spanish early bilinguals (6)
- Basque monolingual childhood (16)
- Spanish monolingual childhood (6)

Experiment II

Materials

- 48 sentences in 24 pairs, A word-order vs. B word-order

Type I	Target sentences	Fillers	
	4 Goal+DO pairs	4 Source + Goal pairs	intr. V
	4 Source+DO pairs	4 IO-DO [-motion] pairs	
Type II	Target sentences		
	4 Source+Goal+DO pairs	4 Adv PP +IO+DO pairs	
		<i>goiz-(e)an</i>	
		morning-LOC	'in the morning'

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	4 Source+DO pairs	4 IO-DO [-motion] pairs

Type II	Target sentences	
	4 Source+Goal+DO pairs	4 Adv PP +IO+DO pairs

goiz-(e)an
morning-LOC 'in the morning'

Stimuli

- Participants were asked to carefully read the sentences and then, to select the sentence with the most natural word order.
- Trial sentences (3) before starting with the task.

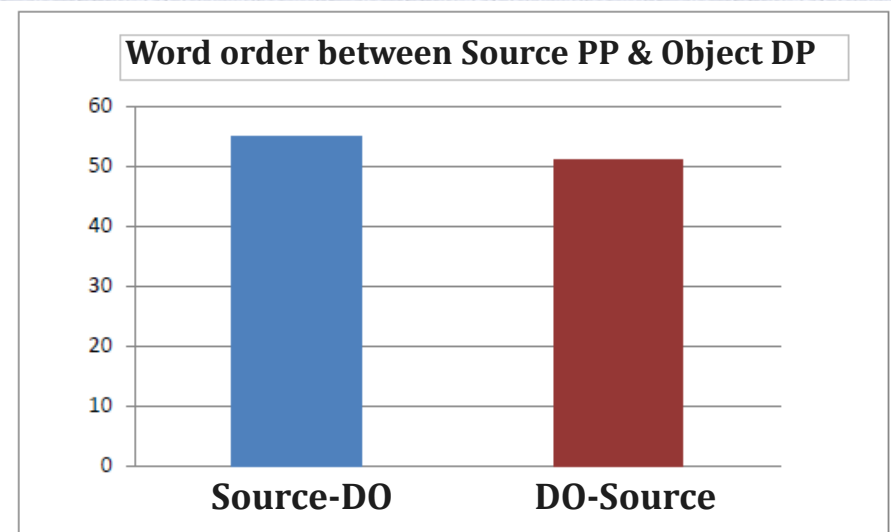
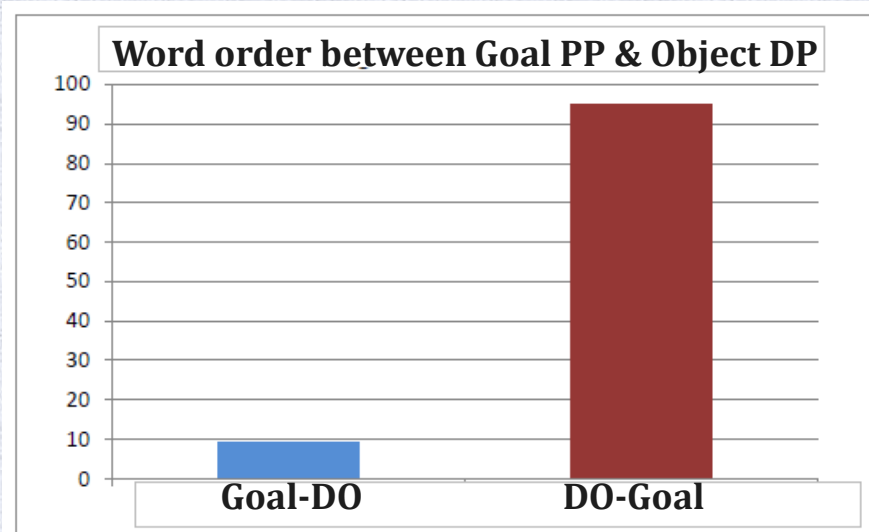
Results

- The total valide sample 312 answers: 215 DO-PP (68.9%) 97 PP-DO (31.1%)

Type I

- DO-Goal PP 91.3% (95/104)
 4. A) Arrantzaleak [uretara] [arrain txikiak] itzuli ditu. (5%)
B) Arrantzaleak [arrain txikiak] [uretara] itzuli ditu. (95%)
‘The fisherman returned the small fishes to water’
- Source PP-DO 52% (55/106) & DO-Source PP 48% (51/106)
 7. A) Peruk kanika gorriak poltsikotik atera ditu. (64%)
B) Peruk poltsikotik kanika gorriak atera ditu. (36%)
‘Peru has taken the red marbles out of the pocket’

Results



- Hypothesis I confirmed for Goal PPs ($p > 0.001$)
- Not confirmed for Source PPs ($p = 0.59$)
- In any case, these results reflect an asymmetrical distribution.

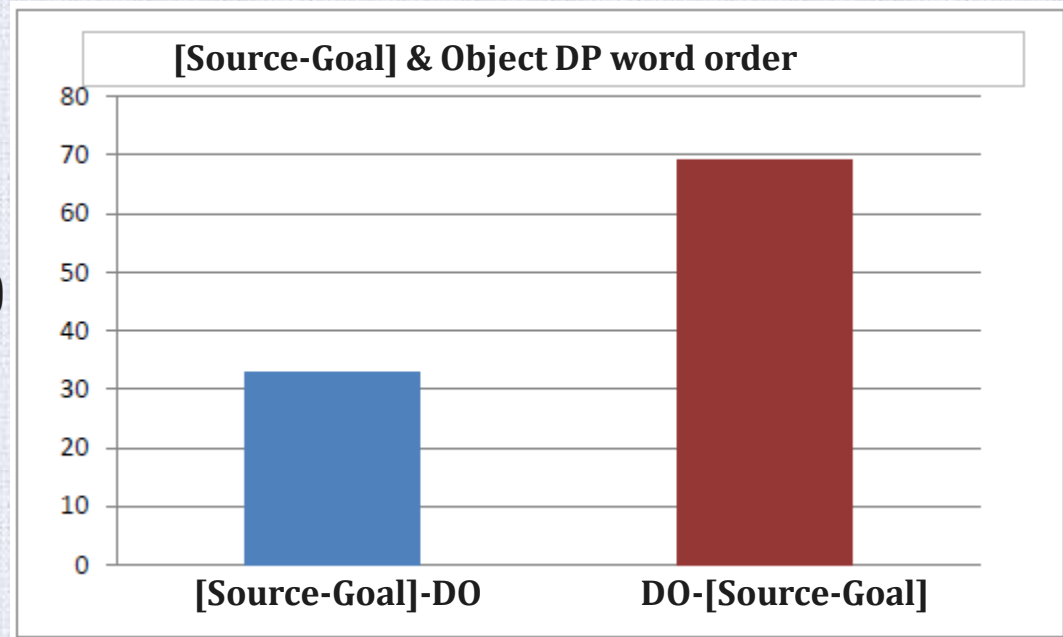
Results

Type II

-DO-[Source-Goal] 69/102(67.7%)

-[Source-Goal]-DO 33/102 (32.3%)

- **22A [Source-Goal]-DO 48%**
22B DO-[Source-Goal] 52%



- **Hypothesis II confirmed??: Source does not attract Goal to periphery, instead Goal attracts Source to O_V position.**

Conclusions

Argument PPs

Intransitive motion verbs

- (14) a. Ni kaletik nator.
'I come from the street'
- b. *Ni nator.
'*I come'

Any locative PP (ALL, ABL, LOC)

Transitive motion verbs

- (15) a. Nik ogia (etxera) dakart.
'I bring bread home'
- b. Nik kaletik ogia dakart.
'I bring bread from the street'

Goal PPs

Adjunct PPs

[-motion] [-location] verbs

- (16) a. Nik goizean ogia jan dut
'I ate bread this morning'
- b. Nik gerora egia jakin dut
'I knew the truth afterwards'

Any locative PP

Conclusions

Argument PPs

Adjunct PPs

Intransitive motion verbs

Transitive motion verbs

[-motion] [-location] verbs

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'I come from the street'

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'I bring bread home'

b. Nik kaletik ogia dakart.
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'I ate bread this morning'

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'I knew the truth afterwards'

Any locative PP (ALL, ABL, LOC)

Goal PPs

Any locative PP

Argument structure for ditransitive motion & displacement verbs

Subject [Recipient/Benefactive < Source < $\begin{matrix} \text{Goal} \\ \text{Theme} \end{matrix} \text{] Verb$

- If Source & Goal co-occur > Benefactive-[Source-Goal] word order

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**VIELEN DANK
MILA ESKER
THANK YOU**

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