

# Typology, complexity and subordination in Korlai Indo-Portuguese

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# Introduction

## Focus of the Presentation

Syntactic and semantic issues in two kinds of subordinate clauses in Korlai Indo-Portuguese (henceforth Korlai):

- finite **complement clauses**
- finite ‘when’ **adverbial clauses**

.

# Introduction

## Rationale

- The reason for focusing on these two kinds is that they both are marked with *ki*, as well as with other markers (also with zero).
- Other coordinate/subordinate clauses (e.g. relative, purpose, ‘what’ complement clauses, ‘or’ coordinate clauses marked only by *ki*) are not discussed in any detail.

# Introduction

## **The goals of the Presentation**

- to describe Korlai finite complement and ‘when’ adverbial clauses from a comparative perspective, and
- to offer an account for why they are marked as they are.

# Introduction

## Markers to be Discussed

- Korlai subordinators *ki*, in two functions: as a complementizer (COMP) and as a temporal (‘when’) conjunction.
- Korlai subordinators that overlap functionally with COMP *ki*, namely, *purís* ‘COMP’, or that co-occur with *ki*, as in the case *kər ki* ‘[irrealis] when’.

# Introduction

## Complement Clauses in Question

*El haló (ki) eló lə vi amya (purís)*

3SG said COMP 3PL FUTcome tomorrow COMP

‘S/he said (that) they would come tomorrow.’

# Introduction

## ‘when’ Subordinate Clauses in Question

*Teru kadz ki jave nə ti kumen.*

Teru house when came 1PL PST eating

‘When Teru got to the house, we were eating.’

*Teru kadz kər-ki lə vi nə lə kume.*

Teru house when.IRREALIS-SUB FUT come 1PL FUT eat

‘When Teru comes, we will eat.’

*\*Teru kadz kər jave nə ti kumen.*

*\*Teru kadz kər lə vi nə lə kume.*

*\*Teru kadz ki lə vi nə lə kume.*

# Introduction

## Other Korlai Clauses marked with *ki*

### Relative (subordinate) *ki*:

*ɔm ʃnt ki jave nɔ irmãw tɛ*  
man yesterday REL came our brother be.PRS

‘The man who came yesterday is our brother.’

### Complement marker (subordinate) *ki* ‘what’:

*ki* *lə hika kẽ sab.*  
what FUT happen (‘become’) who know

‘Who knows what will happen.’



# Introduction

## Other Korlai Clauses marked with *ki*

### 3. Purpose clause (subordinate) *ki*:

*Lwidz            jave   ñnt                    kader   ki            konsárta.*

Lwidz            came yesterday            chair   COMP repair

‘Lwidz came to repair yesterday.’

### 4. Coordinate conjunction *ki* ‘or’:

*use                    lə            vi            nə            kosid   ki            nãw?*

you.FORM   FUT   come   1PL   with   or   NEG

‘Will you come with us or not?’

# Introduction

## Hypothesis 1

- The double-headed COMP SUBORD ‘when’ clauses have developed due to an analogical extension across languages (Marathi to Korlai) in a bilingual situation.
- Analogical extensions are cognitive processes, and depend upon the recognition of similarity between two or more items, classes or constructions (Fischer 2013, Harris and Campbell 1995, ch3).
- It is one mechanism of syntactic change that works across phrases, extending a form from one syntactic environment to another (De Smet, 2009).

# Introduction

## Hypothesis 1 (cont.)

- The Korlai constructions COMP [<sub>S</sub> \_\_\_\_ ] COMP and [<sub>S</sub> \_\_\_\_ ] COMP, and the ‘when’ SUBORD [<sub>S</sub> \_\_\_\_ ] ‘then’ SUBORD are best accounted for by appealing to the process of analogical extension.
- The Marathi co-relative construction in the ‘when’ and ‘if’ subordinate clauses is extended, with changes, to Korlai’s most commonly used subordination construction (COMP), and to the irrealis ‘when’ clauses (beginning stages).

# Introduction

## Hypothesis 2

- The realis and irrealis distinction in Korlai ‘when’ subordinate clauses could possibly be the result of disambiguation.
- The details of this process have not been worked out.
- There may be other more compelling hypotheses.

# Introduction

## Outline of the Talk

1. Typological considerations for complement and temporal adverbial clauses
2. Complexity considerations: paradigmatic vs. syntagmatic complexity (Good 2012)
3. Korlai Clauses in question from a comparative perspective
4. Analogical extension and Disambiguation as accounts for Korlai's innovations in subordinate clause structures.
5. Conclusions

# Typology

# Typology

Diessel (2001) defines the subordinate clauses types examined in this talk as follows:

# Typology

	<u>COMP-clause</u>	<u>ADV-clause</u>
<b>SYNTAX</b>	complement (argument)	adjunct
<b>SEMANTICS</b>	modifier of complement-taking predicate (CTP)	modifier of S/VP
<b>MARKING</b>	zero or complementizer	adverbial subordinator



# Typology

## **Complement Clauses** (e.g. *John said that he was tall*)

- In VO languages, complement clauses consistently follow the main-clause predicate and have clause-initial markers.
- In OV languages, although complement clauses occur before and after the main-clause predicate, they are overall more commonly found after the verbal head (Kuno 1974), Hawkins 1988, Dryer 1992 and Diessel 2001), and the complementizer tends to be clause-initial.

# Typology

## Temporal Subordinate Clauses

(e.g. *John arrived when we were eating.*)

- In VO languages, temporal subordinate clauses occur before and after the verbal head and have a clause-initial subordinator.
- In OV languages, temporal subordinate clauses tend to precede main clause/predicate and have a clause-final subordinator.

# Typology

## Expectation

- Korlai should place its complement clauses after the main clause and have clause-initial complementizers.
- As a recently evolved OV language, Korlai should tend to favor preplacement of its ‘when’ adverbial clauses relative to the main clause, though both orders should be allowed.

# Typology

Portuguese    Marathi    Korlai

	<u>Portuguese</u>	<u>Marathi</u>	<u>Korlai</u>
<b>Word Order</b>	VO	OV	VO=>OV
<b>V-Compl Clause Ord.</b>	V-Comple.	V-Comple.	V-Comple.
<b>COMP Order</b>	Clause-Initial	Clause-Initial	Clause-Initial & Clause-final
<b>Pred-ADV Order</b>	Both	Both	Adv-Pred
<b>Subord. Order</b>	Clause-initial	Clause-initial & Clause-final	Preverbal

# Typology

Portuguese    Marathi    Korlai

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# Complexity

# Complexity

Good's (2012) finding: languages that form from a jargon phase display less paradigmatic complexity (e.g. undergo paradigm reduction) relative to the lexifier and substrate languages, but not less syntagmatic complexity.

# Complexity

## Expectation

Korlai should display **no** reduction in complexity because in subordination strategies because these occur on the syntagmatic axis, not on the paradigmatic axis.



# Complementizers in Korlai

(compared to COMPs in lexifier and  
sub-/adstrate languages)

# COMP in Korlai

- Portuguese: MC *que* [s\_\_\_\_ ]
- Marathi    MC *ki* [s\_\_\_\_ ]  
              MC  $\emptyset$  [s\_\_\_\_ ]
- Korlai     MC  $\emptyset$  [s\_\_\_\_ ]  
              MC *ki* [s\_\_\_\_ ]  
              MC *ki* [s\_\_\_\_ ] *purís*  
              MC    [s\_\_\_\_ ] *purís*

# COMP in Korlai

- **Portuguese** had and has clause-initial heads in complementizer clauses, as well as in other subordinate clauses.

[<sub>S</sub> Matrix Clause [<sub>CP</sub>COMP [<sub>S</sub> subordinate clause]]]

1. [<sub>S</sub> *Creio ...* [<sub>CP</sub> que [<sub>S</sub> *a principal causa destas cousas nacia do conhecimento que ja deles haviam ...*]]]

'I believe that the main cause of these things came from the knowledge that they already had of them.'

(from a chronicle by Zurara [1410-1474])

# COMP in Korlai

- **Marathi** had and has only clause-initial heads in complementizer clauses. (NOTE: in other types of subordinate clauses, it has both both clause-initial and clause final heads.

[Matrix Clause [COMP [subordinate clause]]]

2. *[Mohan mhəŋala [(ki) [Mədhə Dillila gela. ]]]*  
'Mohan said (that) Madhu went to Dehli.'

(adapted from Pandharipande 1997:65)

# COMP in Korlai

- Korlai, unlike both Portuguese and Marathi, has three ways to overtly mark a complement clause, and one headless option.

[<sub>S</sub> Matrix Clause [<sub>CP</sub> ∅ [<sub>S</sub> subordinate clause]]]

[<sub>S</sub> Matrix Clause [<sub>CP</sub> COMP [<sub>S</sub> subordinate clause]]]

[<sub>S</sub> Matrix Clause [<sub>CP</sub> COMP [<sub>S</sub> subordinate clause] COMP]]

[<sub>S</sub> Matrix Clause [<sub>CP</sub> [<sub>S</sub> subordinate clause] COMP]]

# COMP in Korlai

Headless COMP clause:

- 3a. [E1        halo [Ø [e1-o    lə    vi        amya.]]]  
      3SG    say-PST    3-PL FUT come tomorrow  
      ‘S/he said they would come tomorrow.’

# COMP in Korlai

## Clause-initial COMP:

- 3b. [Eɪ halo      ki      [eɪ-o lə      vi      amyɑ.]]  
3SG say-PST    COMP      3-PL FUT    come tomorrow  
‘S/he said they will/would come tomorrow.’

# COMP in Korlai

Clause-initial with clause-final COMPs:

3c.[El halo      ki      [el-o lə      vi      amya]      purís]

3SG say-PST COMP 3-PL FUT come tomorrow COMP

‘S/he said they will/would come tomorrow.’



# COMP in Korlai

Clause-final COMP:

3d.[Elhalo      [∅      [el-o lə      vi      amya]      purís]]

3SG say-PST COMP 3-PL FUT come tomorrow COMP

‘S/he said they would come tomorrow.’

# COMP in Korlai

## Section Summary

- Portuguese and Marathi main-subordinate clause orders, and complementizer order within the subordinate clause, are in line with what is typologically expected.
- While the order of MC-SC in Korlai is typologically expected, the manner in which complement clauses are marked (clause-initially and clause-finally) represents a complexification in the subordination system.

# COMP in Korlai

## Section Summary

(continued)

- To understand where this double marking may come from, we need to look at Marathi ‘when’ subordinate clauses, as well as other subordinate clause types.

# ‘when’ Adverbial Clauses in Korlai

(compared to comparable structures  
in lexifier and sub-/adstrate languages)

# 'when' Clauses in Korlai

- Portuguese: *quando* [<sub>S</sub> \_\_\_\_ ] MC  
MC *quando* [<sub>S</sub> \_\_\_\_ ]
- Marathi: *đžēmwha* [<sub>S</sub> \_\_\_\_ ] *tēmwha* MC  
MC *đžēmwha* [<sub>S</sub> \_\_\_\_ ]  
[<sub>S</sub> \_\_\_\_ ] *tēmwha* MC
- Korlai [<sub>CP</sub> XP *ki* [<sub>VP</sub> \_\_\_\_ ] ] MC (realis)  
[<sub>CP</sub> XP *kər ki* [<sub>VP</sub> \_\_\_\_ ] ] MC (irrealis)

# ‘when’ Clauses in Korlai

- **Portuguese** had and has clause-initial heads in ‘when’ adverbial clauses. The ‘when’ clause can appear before or after the matrix clause.

[<sub>S</sub> Matrix Clause [<sub>CP</sub> ‘when’ [<sub>S</sub> \_\_\_\_\_ ]]]

[<sub>S</sub> [<sub>CP</sub> ‘when’ [<sub>S</sub> \_\_\_\_\_ ] Matrix Clause]]

4a. [<sub>S</sub> [<sub>CP</sub> quando [<sub>S</sub> *os das caravelas viram palmeiras y árvores altas*] *bem conheceram que eram perto do rio do Nilo.*]]

4b. [<sub>S</sub> *Bem conheceram que eram perto do rio do Nilo*  
[<sub>CP</sub> quando [<sub>S</sub> *os das caravelas viram palmeiras y árvores altas*]]

‘When the ones from the ships saw palm trees and other tall trees, they knew well that they were near the Nile River.’

taken and adapted from a chronicle by Zurara [1410-1474])

# 'when' Clauses in Korlai

- **Marathi** places 'when' adverbial clauses before (5a) and after (5b) the matrix clause. Moreover, it has a co-relative construction (5a), both elements of which can appear alone.

5a. *ḍḗmwha* *ti anāndi aste* (*tēmwha*) *ti gate.*

'when she happy is then she sings

5b. *Ti gate* *ḍḗmwha* *ti anāndi aste.*

she sings when she happy is

5c. *Ti anāndi aste, tēmwha gate.*

she happy is then sings

'When she's happy, she sings.' (with relevant permutations)

(adapted from Pandharipande 1997:104-105)

# ‘when’ Clauses in Korlai

**Korlai**, unlike Marathi and Portuguese, displays three innovations:

1. It only allows subordinate clause-matrix clause order.
2. Its subordinators must occur in immediate pre-VP position.
3. It has two subordinators: one used in realis contexts, the other used in irrealis contexts.



# ‘when’ Clauses in Korlai

Realis context:

6a. *[[Teru kadz [ki jave]] [nə ti kumen.]]*

Teru house ‘when’ came 1PL PST eating

‘When Teru came, we were eating.’

# ‘when’ Clauses in Korlai

Irrealis context:

*6b. [[Teru kadz [kər                    ki    [lə vi ]]]*

Teru house ‘when-IRR SUB FUT come

*[[ (atodz) nə    lə    kume.]]*

then            1PL FUT eat

‘When Teru comes, we will eat.’

# ‘when’ Clauses in Korlai

## Section Summary

### Typologically:

- the flexibility of Portuguese clause order (MC-SC and SC-MC) is expected.
- Marathi’s clause order flexibility (both MC-SC and SC-MC) runs counter to the default expectation for OV languages to allow only SC-MC order.
- Korlai’s sole ordering (SC-MC) option matches the default expectation of OV languages. However, the immediate pre-VP subordinator slot and the realis-irrealis distinction coded in the subordinators represent innovations that complexify ‘when’ clause subordination and are unexpected. Also unexpected is the optional double SUBORD structure, only found in irrealis contexts

# 'when' Clauses in Korlai

## Section Summary

(continued)

- Although the Marathi co-relative construction is typologically not expected or predicted, it is nevertheless found as a major subordination construction in Marathi and in other Indo-Aryan languages.
- It may be the model for the double COMP and SUBORD constructions found in Korlai.

A (Brief) Analogical  
Account of Korlai's  
Double COMP and Double  
SUBORD Constructions

# Analogical Extension

## Hypothesis 1

- The double-headed COMP and SUBOR ‘when’ clauses have developed due to an analogical extension across languages (Marathi to Korlai) in a bilingual situation.
- Analogical extension, a cognitive process, is based on the recognition of similarity between two or more items, classes or constructions (Fischer 2013, Harris and Campbell 1995, ch3).
- It is one mechanism of syntactic change that works across phrases, extending a form from one syntactic environment to another (De Smet, 2009).

# Analogical Extension

In the corpora consulted French, English, Spanish, Portuguese, looking at 3 subordinate constructions, the ordering from the most common to least common are:

COMP [s \_\_\_\_\_ ]

‘when’ [s \_\_\_\_\_ ]

‘if’ [s \_\_\_\_\_ ]

# Analogical Extension

In Marathi, the 4 most frequently occurring subordinate constructions seem to be:

COMP [s \_\_\_\_\_ ]

[s \_\_\_\_\_ ] QUOT

‘when’ [s \_\_\_\_\_ ] (‘then’)

‘if’ [s \_\_\_\_\_ ] (‘so’)



# Analogical Extension

In the Korlai corpus, the 4 most frequently occurring subordinate constructions, in order, are:

COMP [S \_\_\_\_\_ ]

[S \_\_\_\_\_ ] QUOT

[CP XP ‘when’ [VP \_\_\_\_\_ ]] (*atodz* ‘then’ )

[CP XP ‘if’ [VP \_\_\_\_\_ ]] ‘so’ (*M tər*)

# Analogical Extension

- the Marathi co-relative construction is found in frequently used subordinate clauses, most notably the ‘when’ (*džēmwha-tēmwha*) and ‘if’ (*džər-tər*) subordinate clauses.
- It is reasonable to speculate that the most frequently occurring subordinate construction (the COMP construction) in Korlai is modeled on the Marathi co-relative constructions, using the grammaticalized *purís* (< Ptg. *por isso* ‘because of that’).

# Analogical Extension

- It is reasonable to speculate that the Korlai double SUBORD ‘when’ clauses are also modeled on the Marathi co-relative clause construction found in the same type of temporal subordinate clause.
- Of note, however, is that *atodz* is not grammaticalized to the extent that it is only a subordinator. It is still productively used as a temporal adverb.

# Disambiguation

‘when’-irrealis (subordinate) kər-ki:

*ɔm amyɑ kər-ki lə vi nɔ lə ti kume.*

man tomorr. ‘when’ FUT come 1PL FUT eating

‘When the man comes tomorrow, we were eating.’

**Relative (subordinate) ki:**

*ɔm amyɑ ki lə vi nɔ irmãw tɛ*

man tomorr. REL FUT come 1PLbrother be.PRS

‘The man who’ll come tomorrow is our brother.’

# Disambiguation

‘when’-realis (subordinate) ki:

*ɔm ʃnt ki jave nɔ ti kumen.*

man yesterday ‘when’ came 1PL PST eating

‘When the man came yesterday, we were eating.’

**Relative (subordinate) ki:**

*ɔm ʃnt ki jave nɔ irmãw tɛ*

man yesterday REL came our brother be.PRS

‘The man who came yesterday is our brother.’

# Disambiguation

**‘when’-irrealis (subordinate) kər-ki:**

*ɔm amyɑ kər-ki lə vi nɔ lə ti kume.*

man tomorr. ‘when’ FUT come 1PL FUT eating

‘When the man comes tomorrow, we were eating.’

**Interrogative (matrix clause) kər:**

*ɔm amyɑ kər lə vi?*

man tomorrow when FUT come

‘When will the man come tomorrow?’

# Some Conclusions

# Conclusions

- Typologically, Korlai displays structures and orders not expected but are not counterexamples to typological predictions.
- In terms of complexity, if we follow Good's generalization that creoles should not display a decrease in syntagmatic complexity, this is borne out.
- Good's generalization does not predict anything about why Korlai displays an increase in syntagmatic complexity.



# Conclusions

- The developments seem to be contact induced (subordination markers) or language internal (subordinate clause structures and double subordinators).
- The details of why double subordination in Korlai exists seems clear (analogical extension) though some of the detail still needs to be worked out.

# Conclusions

- The details regarding the development of the subordinate ‘when’ realis-irrealis distinction are far from clear.
- Appealing to disambiguity does not account for much, if anything
- In future research, there is a pressing need to include the many non-finite clause options for expressing ‘when’ subordinate clauses in order to see how these may shed light on the development of the ‘realis-irrealis’ distinction.

# Conclusions

- Example: in present habitual contexts, finite ‘when’ clauses are rare or non-existent, or expressed with ‘if’.

‘when it rains, I stay at home’

*chu shi kaiu, yo kadz mε t’hika.*

rain when fell I house EMPH PRS stay

*chu kain, yo kadz t’ hika*

rain falling I house PRS stay

# Conclusions

Final comment: there is still a lot of work to be done on this topic!

**Mətʃa, Bom !**

**Thank you !**